NICE Perform®
Release 3

Integration with Avaya PD/PDS

Febuary 2008
385A0717-01 Rev. A0

Insight from Interactions™

NICE®

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5,396,371	5,446,603	5,457,782	5,590,188	5,819,005	5,911,134	5,937,029
6,044,355	6,115,746	6,122,665	6,192,346	6,246,752	6,249,570	6,252,946
6,252,947	6,330,025	6,542,602	6,564,368	6,694,374	6,728,345	6,775,372
6,785,369	6,785,370	6,856,343	6,865,604	6,870,920	6,871,229	6,880,004
6,937,706	6,959,079	6,965,886	6,970,829	7,010,106	7,010,109	7,058,589
7,085,728	7,203,655	7,240,328	7,305,082			

385A0717-01 Rev. A0

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Contents

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1

Introduction

This document describes the integration between the Avaya Predictive Dialing System (PDS) and NICE Interactions Center. This integration enables Avaya Predictive Dialing System agents to be recorded and NICE Interactions Center to collect call details.

This integration is the result of a need to record calls initiated by the Avaya Predictive Dialing System. In most cases, when a Predictive Dialing System is used, it is the only source for outbound call information. With this integration, NICE Interactions Center can record outbound calls based on NICE Interactions Center recording plans, Quality Assurance recording plans, and Recording On Demand initiated by an agent.

This integration is relevant for the following:

- NICE Interactions Center: NICE Perform
- Avaya Predictive Dialer

NOTE: Always check the Integration Description Document (IDD) regarding the latest upgraded versions.

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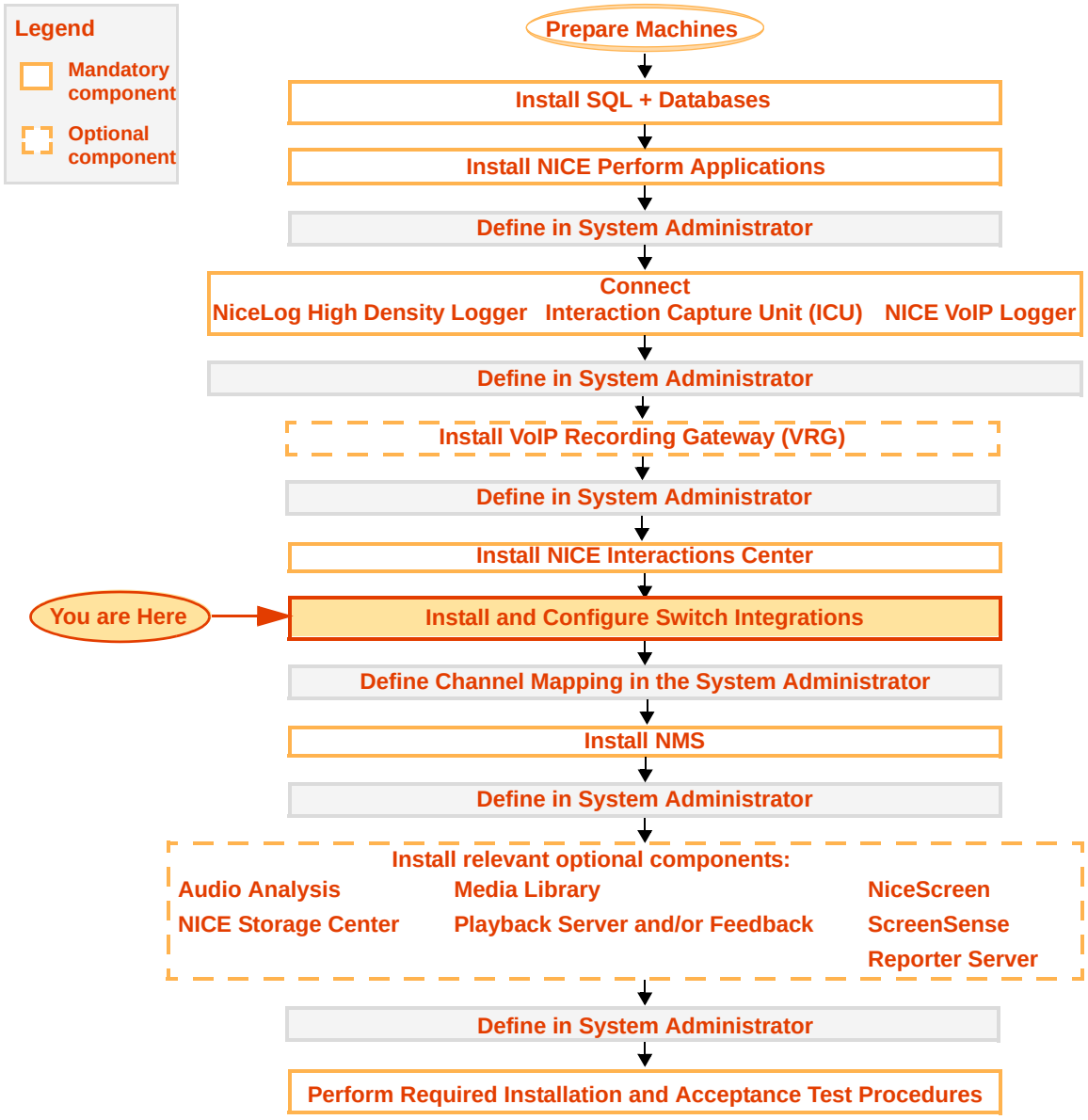
You are Here



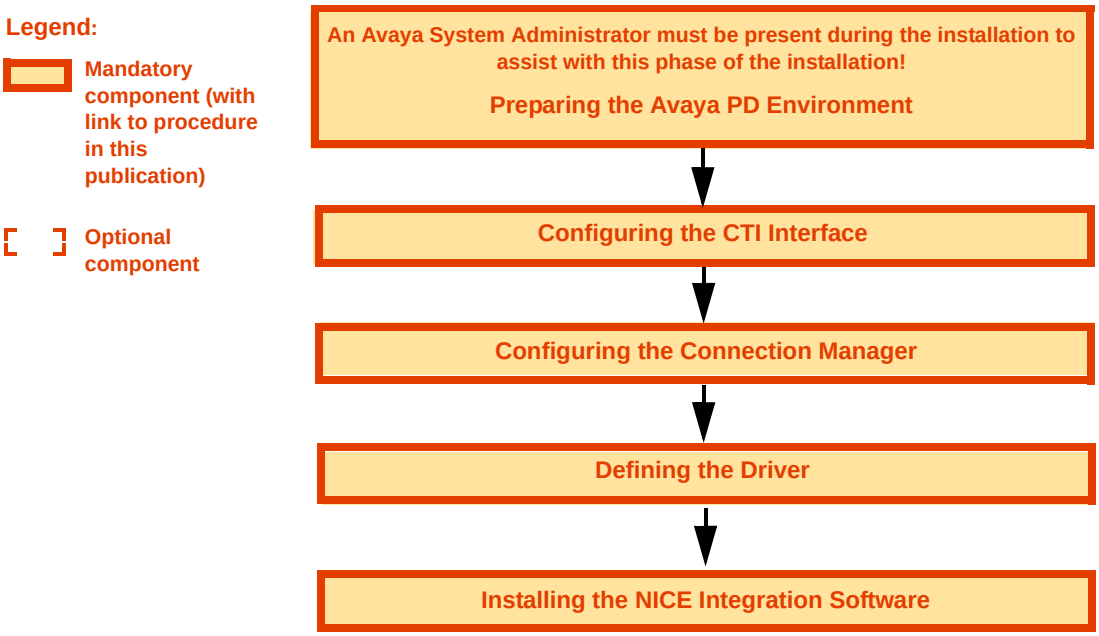
NOTE:

Refer to the *Site Installation Workflow Guide* for a detailed overview of the NICE Perform site installation workflow.

The *Site Installation Workflow Guide* provides general guidelines and procedures for installing NICE Perform at your site, and indicates the exact point during site installation at which to perform switch integrations.

Avaya Predictive Dialer Integration Workflow

The following flow details the components required in the Avaya Predictive Dialer integration.



Terms and Concepts

Table 1-1: Terminology Used in This Document

Term	Description
ACD	Automatic Call Distributor
Blended Environment	Predictive Dialing System that integrates both inbound and outbound call routing.
Blending	The way in which inbound and outbound calls are routed to the agent.
CORBA	**Common Object Request Broker Architecture**: OMG's open, vendor-independent architecture and infrastructure that computer applications use to work together over networks. Using the standard protocol IIOP, a CORBA-based program from any vendor, on almost any computer, operating system, programming language, and network, can inter-operate with a CORBA-based program from the same or another vendor, on almost any other computer, operating system, programming language, and network.
Enserver	Application that runs on Avaya Predictive Dialing System responsible for sending CTI events to NICE Interactions Center via CORBA.
Overflow Environment	Scenario where the PD dials outbound calls until inbound flow exceeds outbound. When inbound flow exceeds outbound, the PD stops outbound calls until inbound pressure lets up.
Overflow Inbound Mode	Agent logs into the PD and all call routing is performed via the PD. In this implementation, headset connection remains intact. The PD can be configured as the agent and receive inbound calls overflowing from the ACD queue.
PD	Predictive Dialing
PDS	Predictive Dialing System
Predictive Inbound Mode	Agent logs in as an ACD agent, accepting inbound calls through the ACD. When switching to outbound mode, the agent logs into the PD. During this time, the agent does not receive any inbound calls from the ACD, even though he or she is still logged in as an ACD agent. When logging out of the PD, the agent resumes receiving inbound calls from the ACD.

For more information regarding Avaya Predicative Dialing concepts, see **Predictive Dialing System Call Flows** on **page 19**.

Avaya Predictive Dialing System Concepts

Agent Types

Below are the agent types supported by Avaya PD:

- **Outbound agent** – The outbound agent receives calls initiated by the Avaya PD. The Avaya PD dials calls routed outbound and records the statistics of all calls.
- **Inbound agent** – Agent who receives inbound calls only.
- **Blended agent** - Agent who handles both inbound and outbound calls.

  For details about the blended environment, see **Blending Types** on **page 13**.
- **Managed agent –** The agent previews customers' files and determines for the Avaya PD which outbound number to call. The Avaya PD calls one number at a time and displays the corresponding customer's record on the agent's screen.

  Following are three types of managed agents:

  - The agent waits for the Avaya PD to initiate calls.
  - The agent initiates calls through the Avaya PD.
  - The agent cancels the customer's record that is displayed on his screen, and moves to the next record. The agent may repeat this process until he initiates a call through the Avaya PD.
- **Manual call** – The Avaya PD initiates an outbound call which the agent handles. However, the call is answered by someone who is not the customer, and who refers the agent to another phone number. In this situation, the agent manually initiates a new outbound call and dials the new number.

Blending Types

Blending refers to the way in which the agent receives inbound and outbound calls. Blending mixes the inbound and outbound calls, enabling the agent the ability to handle both types of calls.

Intelligent Call Blending (Overflow Call Blending)

This is the standard call blending type for the Avaya PD. In the Intelligent Call Blending system, the blended agent handles outbound calls until there are more inbound calls than available inbound agents. In this case, the Avaya PD passes the excess inbound calls to the blended agents. When the call volume decreases, the Avaya PD reverts to passing outbound calls to blended agents.

NOTE: Intelligent Call Blending does not require a special configuration. This system does not require a CTI Server.

Agent Blending (Truly Blended Inbound Overflow)

This is an enhanced call blending system that requires an Automatic Call Distributor (ACD) and Computer Telephony Integration (CTI) server. Avaya PD integrates outbound call activities with inbound call activities on the ACD. The ACD agents log into the Avaya PD and the ACD. The

Avaya PD monitors the activity on the ACD and uses this information to determine when to acquire and release ACD agents from a pool of blended agents. Agent Blending can be implemented in two ways: predictive or proactive.

- Predictive Agent Blending

  Predictive Agent Blending focuses on inbound call traffic. In this environment, by default, agents accept inbound calls until the Avaya PD predicts that there will be too many agents accepting inbound calls. At this point, the Avaya PD acquires agents from the ACD for handling outbound calls until the inbound volume increases.

- Proactive Agent Blending

  Proactive Agent Blending focuses on outbound call traffic. In this environment, the Avaya PD releases agents to inbound calls when inbound calls enter the queue on the ACD. When an agent completes an inbound call, Avaya PD acquires that agent for outbound calls once again.

NOTE: If the contact center site has an ACD, either one of the blending methods can be used. However, both methods cannot reside on the same Predictive Dialing System.

System Architecture

Avaya Predictive Dialing System is a call management system which supports both centralized and distributed call centers.

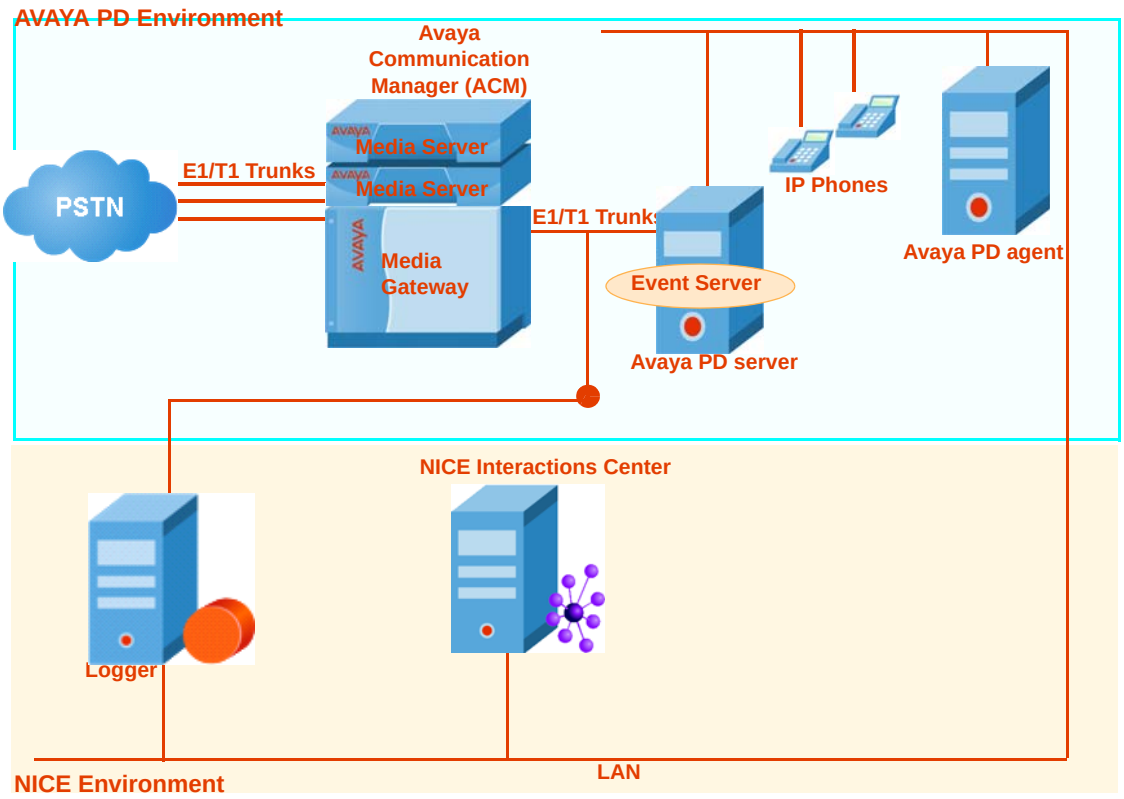
Successful calls, calls that were not answered by an answering machine, busy tone, or not at home tone, are called hits. Using these call statistics, the Avaya PD simultaneously initiates calls, maximizing the time an agent is actively involved in a call (meaning, talking to a person and not to a machine).

Avaya PD performs the following tasks:

- Receives customer records from the call center's host computer
- Selects and sorts customer records based on the call center's business goals
- Allows agents to update customer information on an agent screen or on the host
- Transfers specific call types to agents
- Adjusts the calling pace to meet the call center's requirements
- Monitors ACD inbound traffic and predicts when to acquire and release ACD agents for outbound calls
- Supports outbound, inbound, and blended environments
- Generates job, agent, and system reports
- Uploads record information to the host

NOTE: This integration describes using the PD in Digital mode. It is not relevant for the integrations using the PD in CTI mode. If operating in CTI mode, there is no need to use the PD driver. The configuration should be made using Avaya CT. Refer to the *Integrating with Avaya CT* guide.

Figure 1-1 System Architecture



Components

Avaya PD

- **Avaya Predictive Dialing System (PDS)**: Avaya

  Avaya PD includes the following components:

  - **PD server**: Dialing server that automatically dials the Customer Call Center based on a predefined scheduled campaign.
  - **PD Agent**: Application running on the agent desktop and used by the agent to login to the dialer.
  - **PD Editor and Monitor**: Used by the PD administrator for configuring, running the campaign and monitoring agents activity.
  - **PD Event Service**: The NICE client connects to the Event/Naming services on the PD and receives agent activity and call events from this service.
  - Used to send the call event to the NICE client. The NICE client connects to and receives agent activity and call events from this service.
  - **PG230**: E1/T1 interface connecting to the ACM.

- **Avaya Communication Manager (ACM):** Avaya call processing software.

  The ACM includes the following components:

  - **Media Server**: The Media Server runs the ACM software, and performs real-time management of the calls.
  - **Media Gateway**: The Media Gateway performs signaling and audio conversion. It is controlled by the Media Server and hosts the interface cards (analog, digital, CLAN, MedPro and so on).

NICE Perform Release 3

- **NICE Interactions Center:** The NICE Interactions Center, using the CTI Driver's Information, sends commands to start/stop call recordings. It stores the call information in its databases and controls the various recording programs. The NICE Interactions Center communicates with the CTI server via the Event Server. In this way, the NICE Interactions Center learns the call status, monitors call events and stores them in its database. Users can then run queries to find and play back a call.
- **Logger**: NiceLog is a powerful digital voice logging system. NiceLog Loggers continuously and simultaneously record and archive audio from multiple sources. Audio is recorded to the hard drive of the Logger for immediate playback capability.
- **NICEScreen (Logger) Server**: NiceScreen Logger operates as a service which runs continuously on a dedicated server, managing screen captures received from NICE ScreenAgents. It can be installed on any user-supplied machine that meets system requirements. Each NiceScreen Logger can record up to 250 input channels and play back up to 50 recordings simultaneously. You can install at your site as many NiceScreen Loggers as necessary; each NiceScreen Logger maintains its own storage system. Using NICE Administrator, you can configure different Loggers to record screens from different workstations. The recording is controlled by NICE Interactions Center.

Recording Methods

Integration of the NICE Interactions Center and the Avaya Predictive Dialer can be carried out using the following recording methods:

- **Trunk-side recording** - NiceLog connects to trunks. This is the trunk between the Avaya switch and Avaya PD. This connectivity is used for Total Recording and Selective Recording. See **Trunk-Side Recording Architecture** on **page 22** for details.
- **Extension-side recording** - NiceLog connects directly to the extensions and taps them. This connectivity is usually used for Total Recording. See **Extension-Side Recording Architecture** on **page 23** for details.

Recording Modes

Depending on your CTI switch configuration, the following recording modes are available:

- **Total Recording**

  Records all calls for all connected inputs: All calls (agent-to-customer, customer-to-agent, and agent-to-agent) are recorded. This type of recording is used for resolving disputes.

  When Total Recording is implemented in a Trunk-side configuration, internal (agent-to-agent) calls are not recorded.

- **Interaction-Based Recording**

  Records selected calls (interactions) based on filter criteria: The user selects complete or parts of calls to be recorded according to a predefined schedule or criteria (for example, calls to and from the sales department).

  Interaction-Based Recording can be:

  - Rule-Based
  - Statistical for QM
  - ROD (Recording on Demand)

NICE Interactions Center supports the recording of all Avaya PD agent types and job types, including extension-side recording and trunk-side recording.

Predictive Dialing System Call Flows

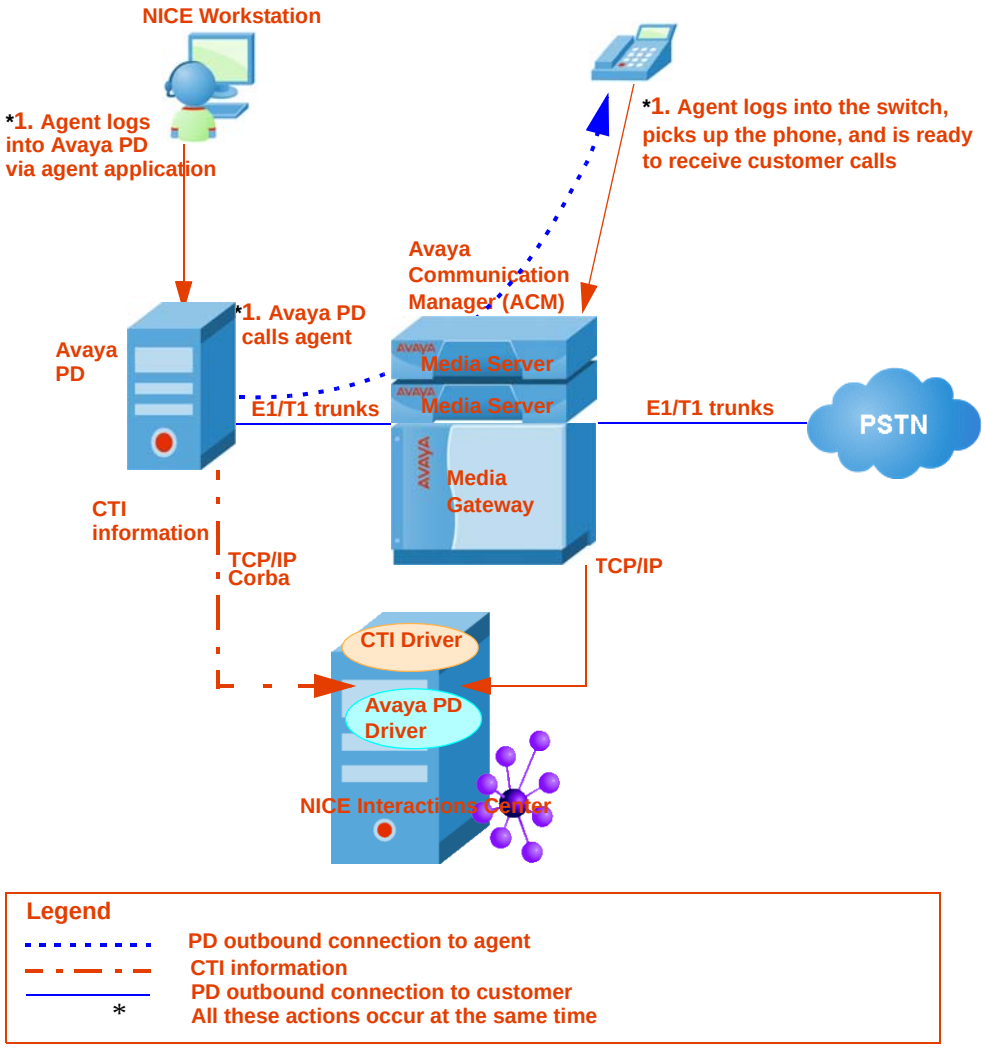
NOTE: The call flows described in this section assume that a CTI server exists at the site.

This section describes the following call flows in the Avaya PD environment:

- **Outbound Call Flow**
- **Simple Inbound Call Flow**
- **Overflow Blended Inbound Call Flow**

Outbound Call Flow

Figure 1-2 Schematic Diagram of the Outbound Call Flow



Referring to **Figure 1-2**, the outbound call flow operates as follows:

1. The agent logs into the Avaya PD via his soft phone or the PD application and at the same time logs into the ACM extension.

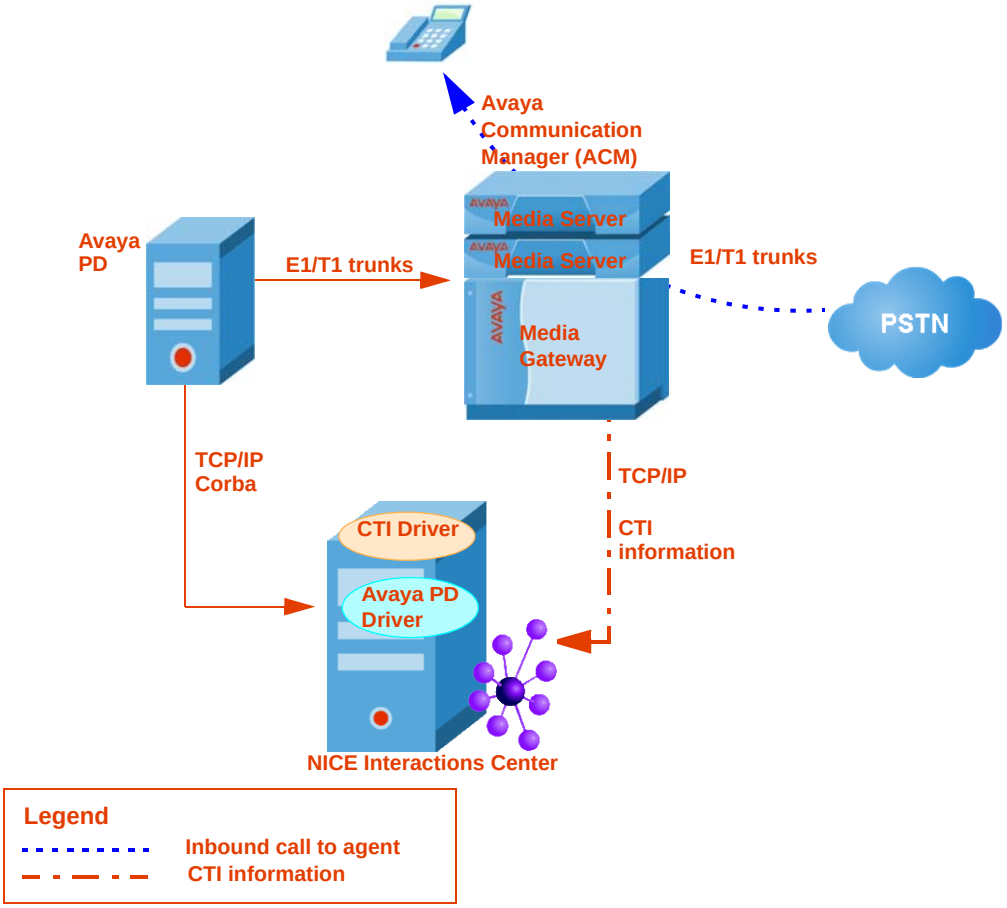
The Avaya PD calls the agent. From now on, this call remains open as long as the agent's phone remains off-hook.

2. The agent is joined to a PD campaign/job.
3. The Avaya PD dials outbound to a customer. When a customer answers the call, the Avaya PD directs the call to an available agent.

   The NICE PD driver receives the CTI information from these outbound calls from the Avaya PD Event Service.

Simple Inbound Call Flow

Figure 1-3 Schematic Diagram of the Inbound Call Flow



Referring to **Figure 1-3**, the inbound call flow operates as follows:

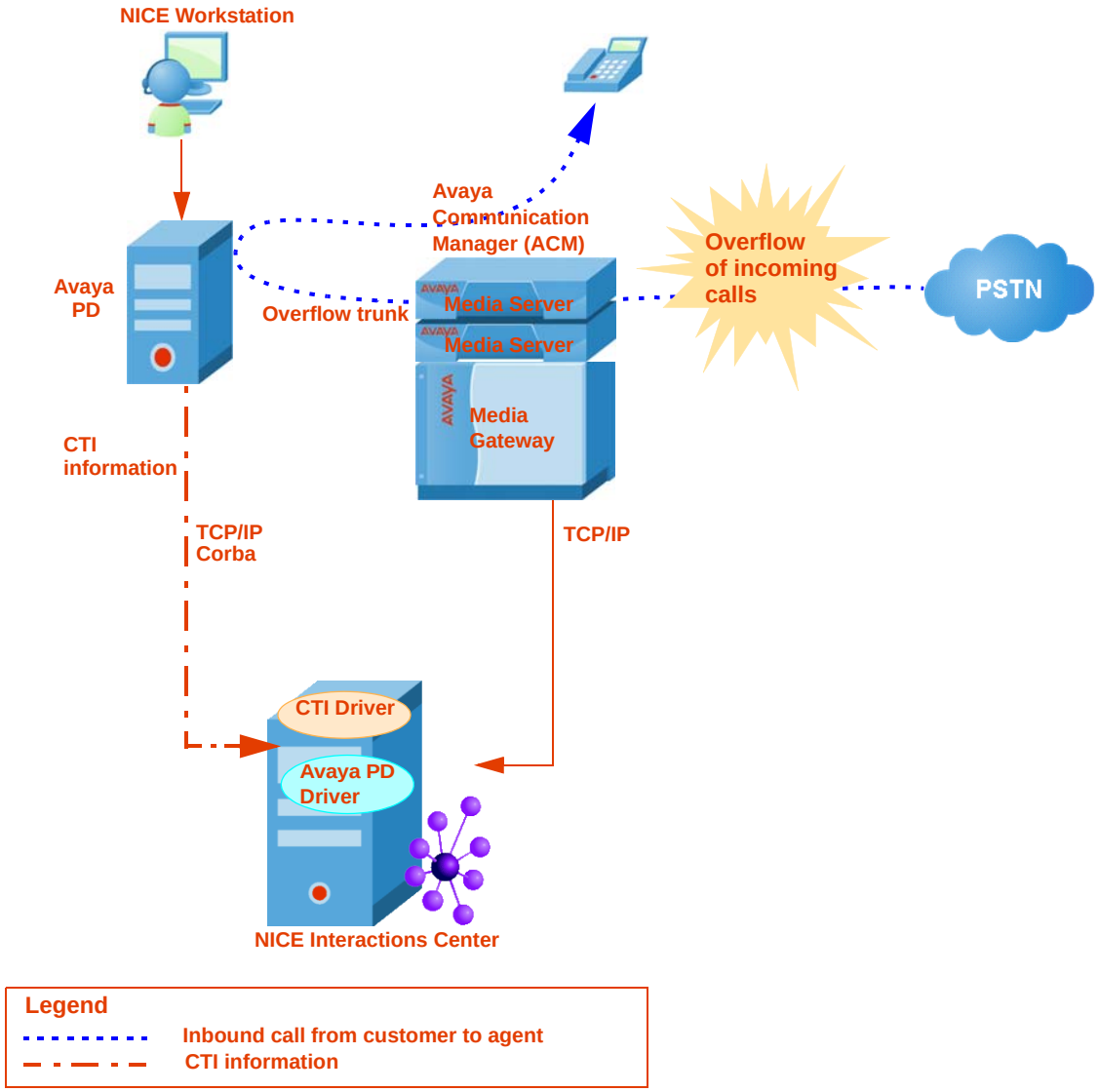
1. The customer calls the agent.
2. The agent answers the call.

   This call does not go through the Avaya PD. The NICE Avaya Generic driver receives the CTI information for this call via the ACM.

NOTE: In the standalone environment (site with no Avaya switch), the Avaya PD functions as the switch. In this case, the NICE PD driver receives the CTI information via the Avaya PD.

Overflow Blended Inbound Call Flow

Figure 1-4 Schematic Diagram of the Overflow Blended Inbound Call Flow



Referring to **Figure 1-4**, the overflow blended inbound call flow operates as follows:

1. The Avaya PD detects overflow of inbound calls.
2. The Avaya PD stops initiating outbound calls, however, leaves the connection to the agent open.
3. Inbound calls are directed by the Avaya PD to the agent via the outbound line. This is called the overflow trunk.

   The NICE PD driver receives the CTI information for these inbound calls from the PD Event service.

Trunk-Side Recording Architecture

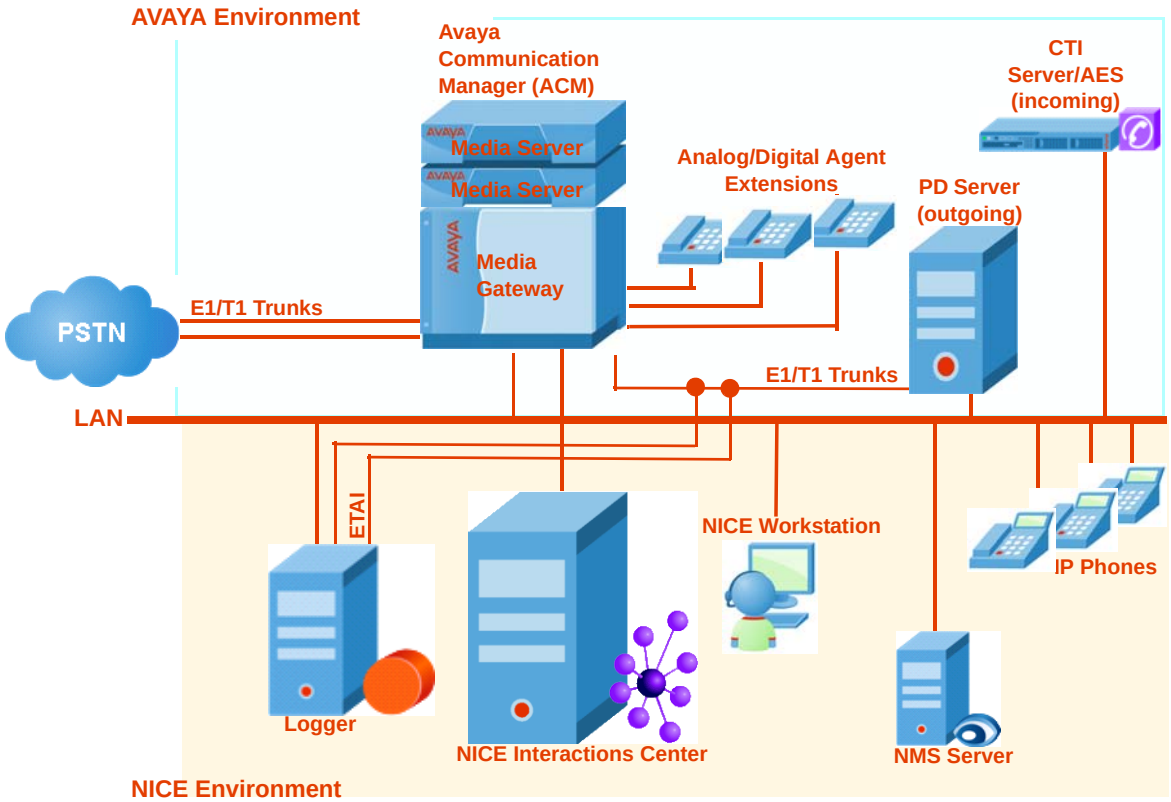
The NiceLog Logger supports Trunk-side recording using the Total Recording or Dynamic/Static Selective Recording methods. In Trunk-side recording systems, NiceLog Loggers receive and sum the E1/T1 trunk inputs, and record them.

IMPORTANT

Always check the Integration Description Document (IDD) regarding the latest upgraded versions for Trunk-side recording.

The Avaya switch sends the Trunk ID to the NICE Interactions Center via the PD server. NICE Interactions Center also receives call data that can be used in queries to retrieve specific calls.

Figure 1-5 Trunk-Side Recording Configuration



Components

For information regarding system components, see **Components** on **page 16**.

Supported Trunks

The following trunk types are supported:

- ISDN-PRI
- CO
- Tie

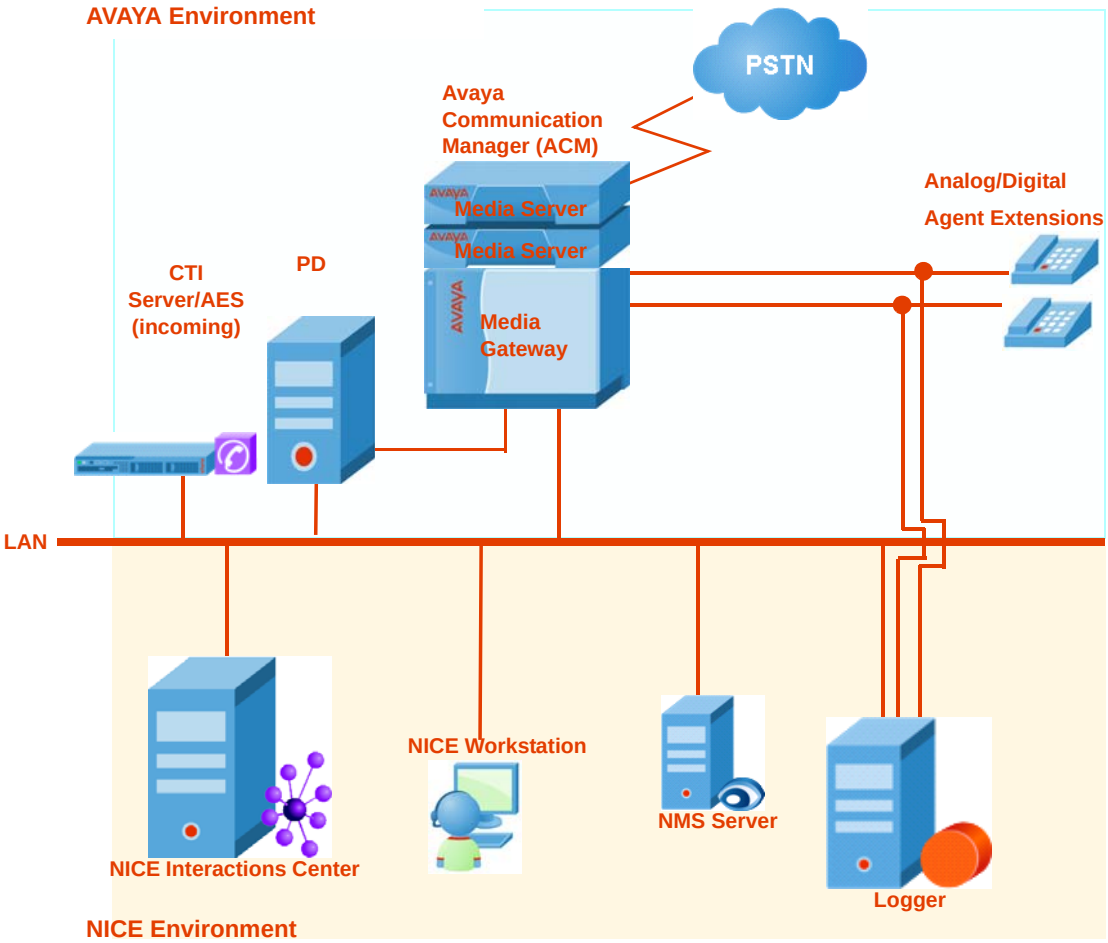
Extension-Side Recording Architecture

The NiceLog Logger supports Extension-side recording.

The Loggers are configured to passively tap the lines connecting the phonesets to the PABX. Each Logger stores these recordings locally for immediate playback. This is later moved for long-term storage.

- NICE Interactions Center builds its **nice interactions** database based on the CTI data that it receives from the PD.
- Users and/or applications can query the **nice interactions** database, which are connected to the NICE Interactions Center via the LAN/WAN.

Figure 1-6 Extension-Side Recording Configuration



In a site with Extension-side Selective Recording, only those calls or lines that are defined as part of a recording program are recorded. Users can choose to record only incoming calls, calls for a number based on DNIS, calls handled by an agent or group of agents, calls from a predefined number, outgoing calls to a specific number, and local calls. Extension-side Interaction-based Recording is implemented when there is a requirement to record most extensions concurrently.

- The NiceLog Logger is connected to each switch extension that the customer wants to record. The Logger input is connected to the main Distribution Frame (MDF).
- The CTI server sends call data in real time as each call is initiated. The NICE Interactions Center determines whether or not to record the call.

Components

For information regarding system components, see **Components** on **page 16**.

Supported Database Fields

NOTE: All the fields depend on whether the switch reports this information!

The following database fields are supported and can be queried:

- Station
- Phone Number (ANI)
- Direction
- Call ID
- Agent ID
- DNIS (Dialed In)
- Trunk Information
- User Data - this information is site-dependent

Business Data Support

The Avaya Predictive Dialer supports the following business data:

- **User Specific Business Data**
- **Fixed Business Data**

User Specific Business Data

The User Specific business data is also called USERDATA or IDENT, which is one of the CTI fields that the Avaya PD interface displays.

In total, there are four business data fields available for customer use.

Fixed Business Data

In addition to the user specific business data, the Avaya PD integration reports the following fixed business data for each call:

1. **CompletionCode**: Completion code value that an agent assigns when releasing a customer record.
2. **OriginalCID**: The original call ID number that was assigned by the Avaya Predictive Dialer server.
3. **JobName**: Identifies the name of the job to which the agent is assigned.
4. **JobNumber**: The job number assigned by the dialer server.
5. **TypeOfJob** - The job type. This can be one of the following:
   - OUTBOUNDJOB
   - INBOUNDJOB
   - MANAGEDJOB
   - BLENDJOB

   To save these fields in the database, you must map the exact names as shown above in the Database server plug-ins.

General Limitations

Avaya PD standalone Integration with Aspect PABX in Extension-side recording

When the Avaya PD standalone integration is used together with Aspect PABX, extension side recording is not supported due to the Avaya PD server reporting the Aspect agent ID instead of the instrument ID in the extension field.

Avaya PDS 11 is not supported

Avaya PDS 11 is not supported due to Avaya changing their Common Object Broker Architecture (CORBA) Orbix interface in version 11 to the TAO CORBA interface in version 12. The current CTI integration is based on the TAO interface.

Switch Driver in Extension-Side Recording

In this setup, you need 2 channels in the logger for each extension as the dialer is configured with its own switch ID.

Recording Problems in the Multiple Driver System

Long Call Problem

Problem: Referring to **Typical Agent Workflow in a Contact Center** on **page 116**, the Avaya PD agents use a dedicated Avaya PD workstation to log into the Event Server. In the typical connectivity scenario, the Avaya PD registers the agents and gives them an internal extension to call. The agents complete the login process by answering the phone, which is a dedicated Avaya PD port (establishing a headset connection). This port stays off-hook and captures the agent for an outbound session. To the PABX, this looks like a long internal call.

Solution: The Rejected Device feature in the CTI driver configuration in the System Administrator addresses this issue. This feature enables you to define the trunk connected to the Avaya PD as a Rejected Device. This prevents the CTI driver from opening the Long Call.

2

Preparing the Avaya PD Environment

This chapter provides guidelines for installing the Avaya PD CTI link.

Contents

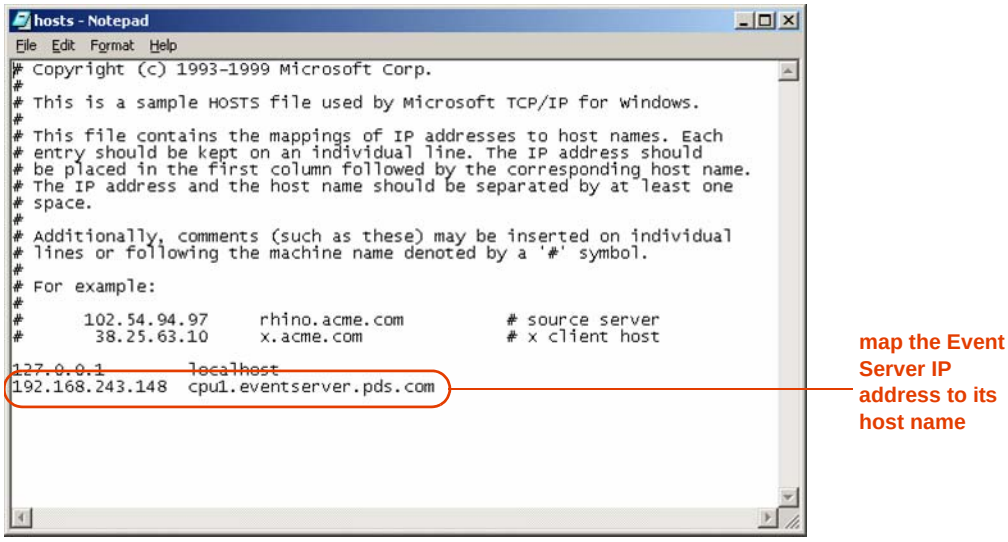
Installing the Avaya PD CTI Link

Before starting the integration of Avaya PD with NICE Perform, do the following:

- In the Host file on the Interactions Center, map the **Event Server IP address** to its host name. For example, in NICE this is 192.168.243.148 cpu1.eventserver.pds.com.

NOTE: Ask for the fully qualified domain name from the Avaya engineer on-site.

Figure 2-1 Host File



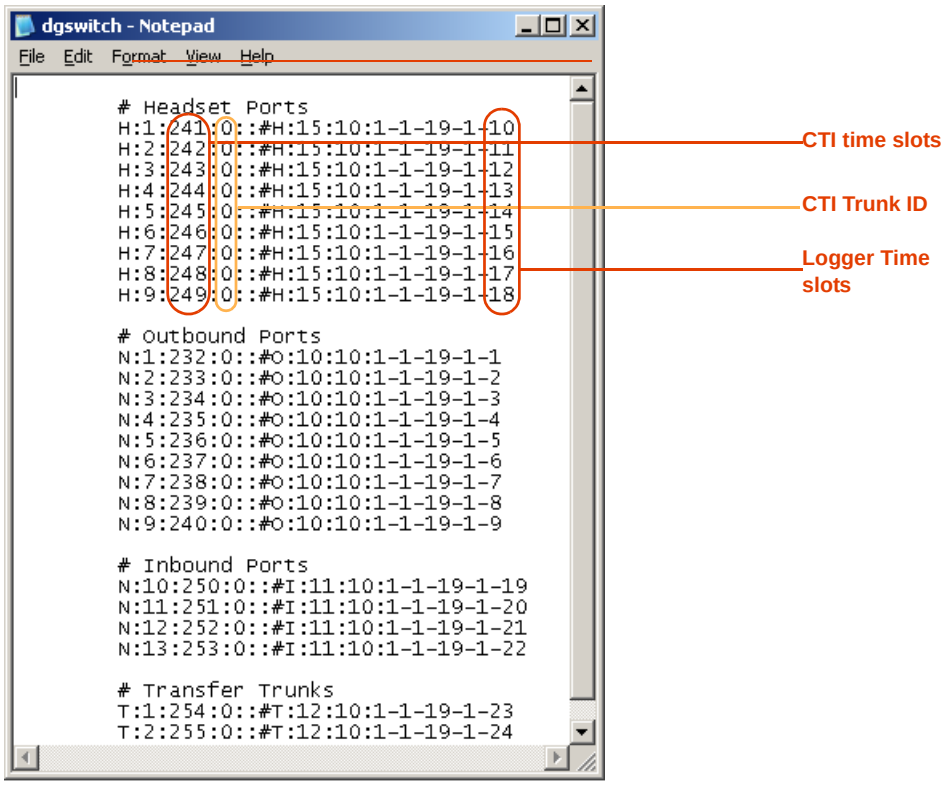
Receiving Trunk Information

To configure the switch to receive the trunk information, follow the procedures below.

To configure the time slots for trunk side recording:

1. Request the **dgswitch.cfg** file from the Avaya switch engineer on-site.
2. Copy the time slots number from the **Headset Ports** (Agent ports), see **Figure 2-2**.

Figure 2-2 Dgswitch.cfg File



IMPORTANT

This file is very important for configuring Channel Mapping.

When configuring Channel Mapping, the time group should be 0. (This can change from site to site.) Define the time slot according to the dgswitch.cfg switch — in particular refer to the Headset port information. The trunk position number should be typed in the **Logger Timeslot**.

For more information regarding Channel Mapping, see the *NICE Channel Mapping Guide*.

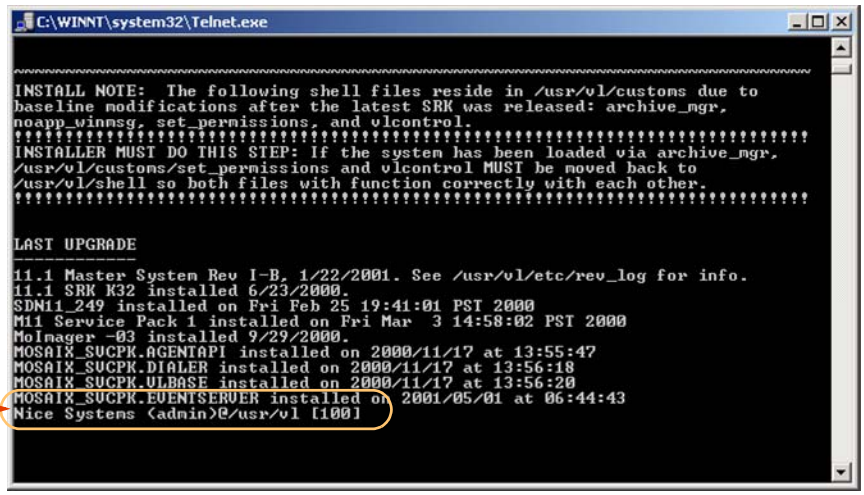
Retrieving the Avaya PDS Agent ID

You can retrieve the Avaya PDS agent ID by following the procedures below.

How to get the Avaya PDS agent ID:

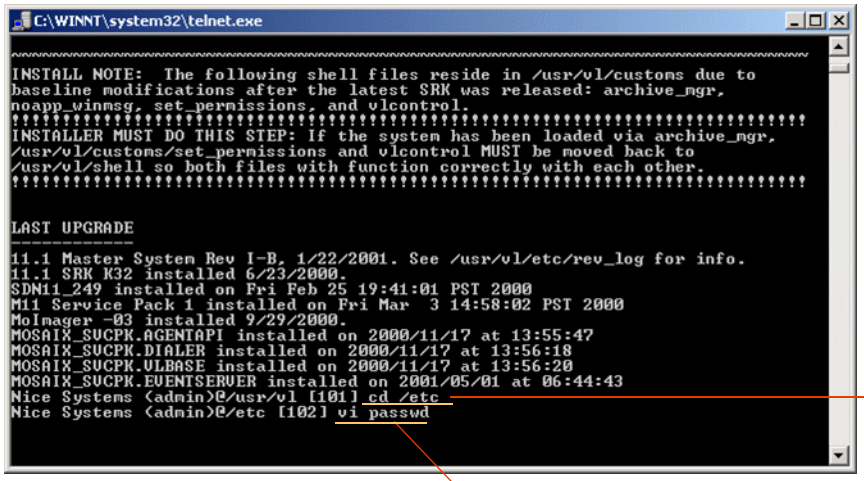
1. Login into the Avaya PDS via telnet.

Figure 2-3 Telnet.exe - Login



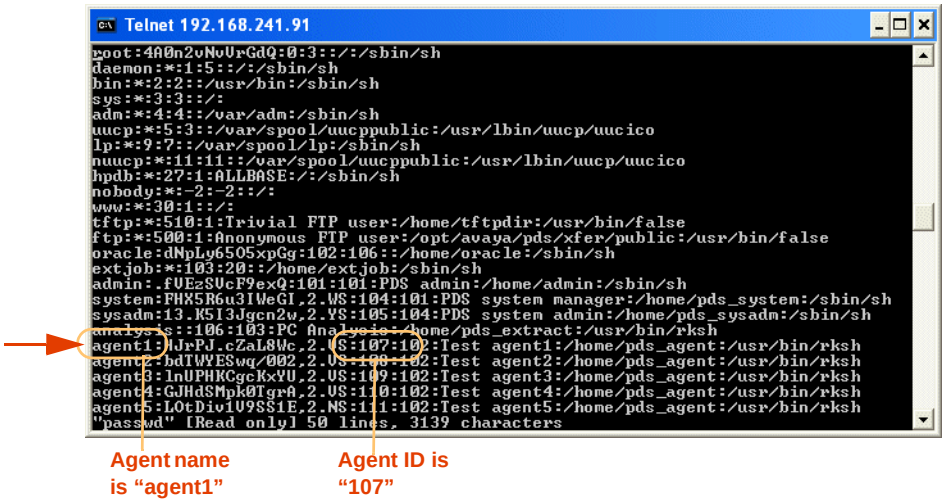
2. To change the folder to **etc**, type **cd /etc** and press <**Enter**>.
3. To view the file password, type **vi passwd** and press <**Enter**>.

Figure 2-4 Telnet.exe - Changing Folder and Viewing Password



The line **agent1:z1odNs5/v1eTw:107** in Figure 2-5 on page 31 means that the agent name is **agent1** and the agent ID that the Avaya PDS driver receives is **107**, see below.

Figure 2-5 Driver - Interface Configuration Window



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3

Integrating Avaya Predictive Dialer with NICE Perform

This chapter describes the procedures for integrating Avaya Predictive Dialer with NICE Perform Release 3.

IMPORTANT

You must install and configure the Avaya Predictive Dialer **before** you install and configure the NICE Perform integrations.

Contents

Before you Begin

Configuration Information

To configure the NICE Perform Integrations, you run a series of configuration wizards. Each configuration wizard requires you to enter relevant information.

Before running the configurations wizards, you must obtain the necessary information for each of the following configuration wizards:

- **CTI Interface Configuration**
- **Connection Manager Configuration**
- **Driver Configuration**

CTI Interface Configuration

NOTE: It is important that the CTI System Administrator is present during the installation to assist with this phase of the installation.

Before proceeding with Configuring the CTI Interface on **page 36**, **have ready the following information:**

- Avaya PD version
- Avaya PD server IP Address
- Avaya PD Event Service host name
- Avaya PD Naming Service host name
- Avaya PD client user name (usually client1 - but you need to verify it with the System Administrator)
- Avaya PD client password (usually server1 - but you need to verify it with the System Administrator)
- For trunk-side recording, dgswitch.cfg from the Avaya engineers
- Avaya PD agents login list
- Recording Method

Connection Manager Configuration

Before proceeding with **Configuring the Connection Manager** on **page 42**, have ready the following information:

- The name, port, and ID number of the Connection Manager
- The IP address or Host Name where the Connection Manager is installed
- Reporting levels for all messages, if different from the defaults

- If any Connection Manager parameters need to be defined, their names and values
- The Interfaces that will be connected to the Connection Manager and any parameters and their values that might need to be customized.

Driver Configuration

Before proceeding with **Defining the Driver** on **page 46**, have ready the following information:

- The name and ID number of the driver
- The IP address or Host Name where the driver is installed
- The NICE Interactions Center servers connected to the driver
- Reporting levels for all messages, if different from the defaults
- If any driver parameters need to be defined, their names and values
- The Interface that will be connected to the driver.

SNMP Service

Before installing the integration software make sure that the SNMP Service is installed on your computer.

IMPORTANT

Verify that you have entered the Event Service host name in the hosts file under c:\Windows\system32\drivers\etc.

Configuring the Integration Package

This section describes the Integration Package configuration procedures.

To integrate the Avaya Predictive Dialer driver to support recording, perform the following procedures:

- **Configuring the CTI Interface**
- **Configuring the Connection Manager**
- **Defining the Driver**
- **Installing the NICE Integration Software**

All system components must also be associated with each other appropriately.

Configuring the CTI Interface

The CTI Interface defines the actual CTI server to which the system will integrate. For every interface, a switch is configured. This is the physical server on which the interface is installed. More than one interface may be installed on the same switch, so when configuring the interface, the correct switch must be defined.

You begin the NICE Perform configurations by configuring the CTI Interface.

Logging in to the System Administrator

This procedure describes how to log in to the System Administrator.

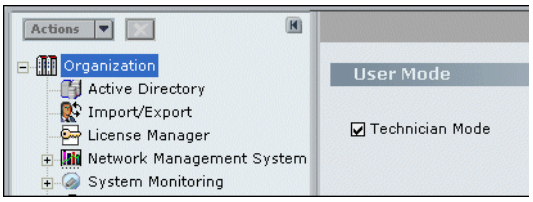
To log in to the System Administrator:

1. Open the System Administrator, as follows:
   a. Log in to the NICE Perform Applications Suite.
   b. From the **Accessories** menu, choose **System Administrator**.

   The System Administrator appears with a list of NICE components under the **Site** branch in the **Organization** tree.

   To add components in the System Administrator, you must work in Technician Mode.

2. Set the System Administrator to Technician Mode:
   a. In the Organization Tree, select the **Organization** branch.



   b. Mark the **Technician Mode** checkbox and click **Save**  .

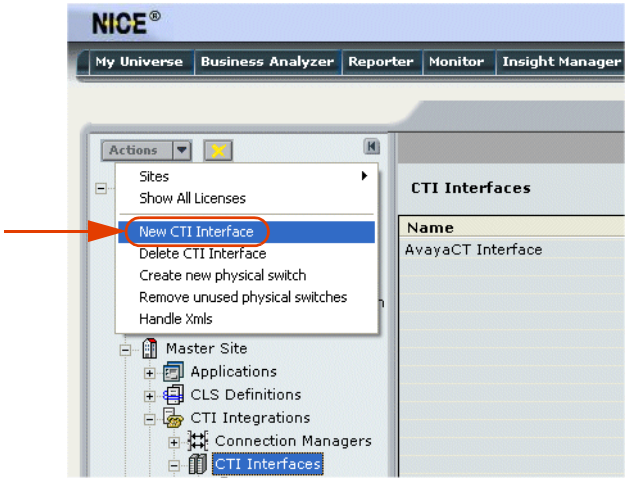
Creating a CTI Interface

This procedure describes how to create a CTI interface.

To create a CTI interface:

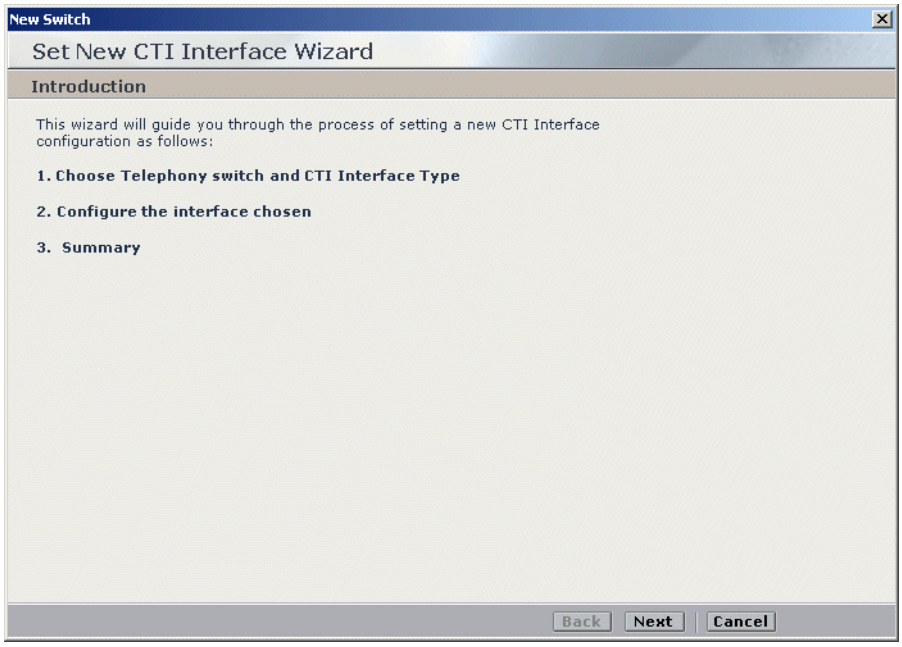
1. In the System Administrator, in the **Organization** tree, navigate to **Master Site > CTI Integrations** and select **CTI Interfaces**.
2. From the **Actions** menu, choose **New CTI Interface**.

Figure 3-1 Selecting New CTI Interface



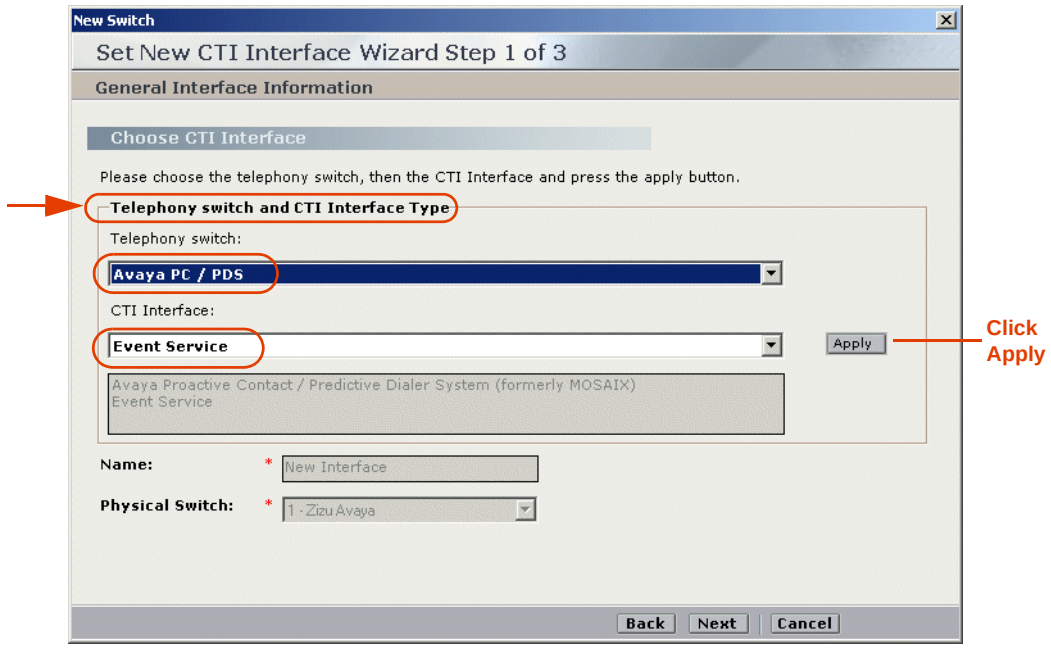
The Set New CTI Interface Wizard window appears.

Figure 3-2 Set New CTI Interface Wizard - Introduction Window



3. Click **Next**. The Set New CTI Wizard Step 1 of 3 window appears displaying the **Choose CTI Interface** section.

Figure 3-3 Choose CTI Interface Section



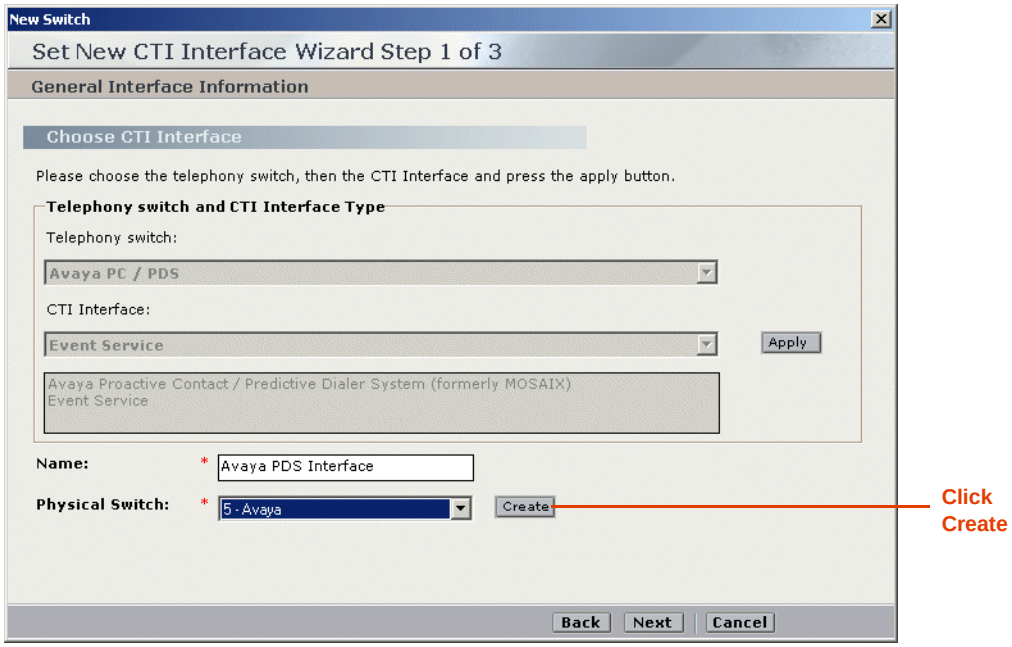
a. In the **Telephone switch and CTI Interface Type** area, click the **Telephony switch** drop-down list and choose **Aspect PC/PDS**.

b. Click the **CTI Interface** drop-down list and select **Event Service**.

c. Click **Apply**.

The **Name** and **Physical Switch** fields become enabled and the **Create** button appears.

Figure 3-4 Choose CTI Interface Area



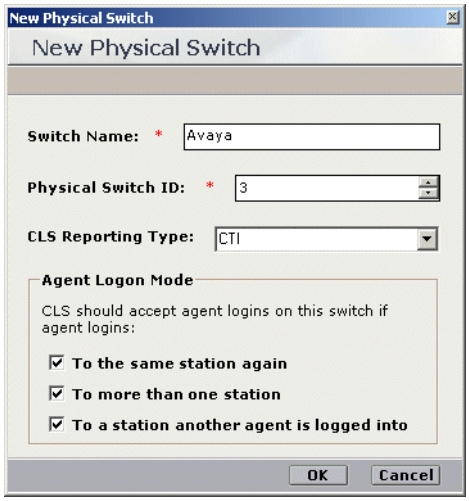
d. In the **Name** field, type the new interface name.

IMPORTANT
When working in multiple driver systems, each driver has to have its own physical switch ID number.

e. Select the **Physical Switch**:

- To create a new physical switch, click **Create**. The New Physical Switch window appears. Continue with step numbers 4 and 5.
- To use an existing switch, continue with step number 5.

Figure 3-5 New Physical Switch Window



4. **To create a New Physical Switch:**

a. In the **Switch Name** field, type a name for the switch.

b. In the **Physical Switch ID** field, type a switch ID.

NOTE: Give the Physical Switch a unique ID.

c. In the **CLS Reporting Type** field, leave **CTI** as the default setting.

d. **To enable non-standard NICE CLS log-in options**, in the **Agent Logon Mode** area, leave the default checkboxes marked:

Marking **To the same station again** - allows agents to log in to the same workstation more than once.

Marking **To more than one station** - allows agents to log in to more than one workstation.

Marking **To a station another agent is logged into** - allows more than one agent to log in to one workstation.

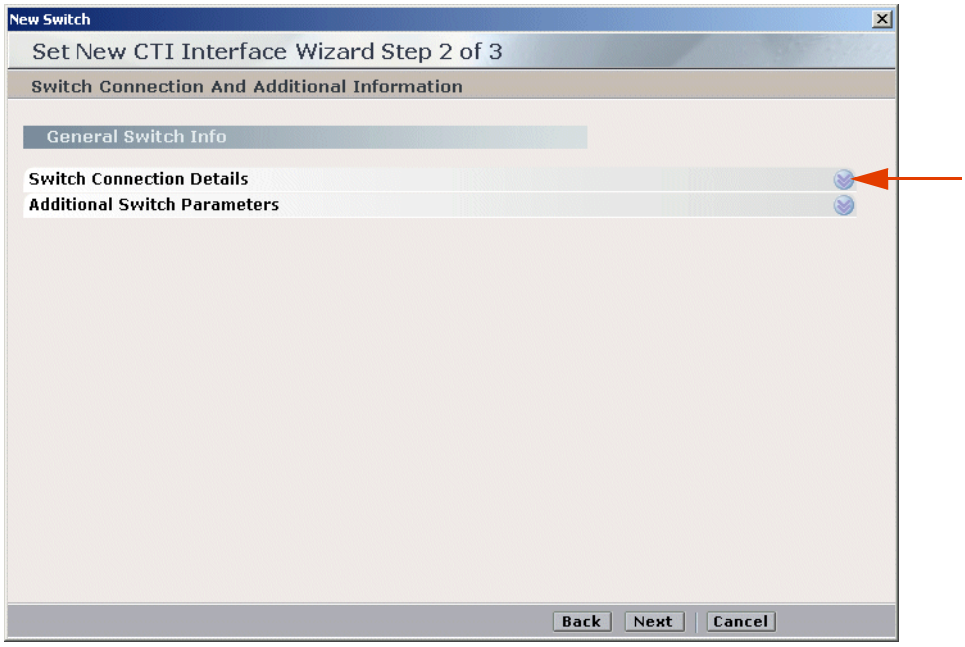
NOTE: It is recommended that you leave all three **Agent Logon modes** marked.

e. Click **OK**. The newly created physical switch now appears in the Physical Switch list. The General Interface Information window reappears.

5. Click the **Physical Switch** list and choose the relevant physical switch.

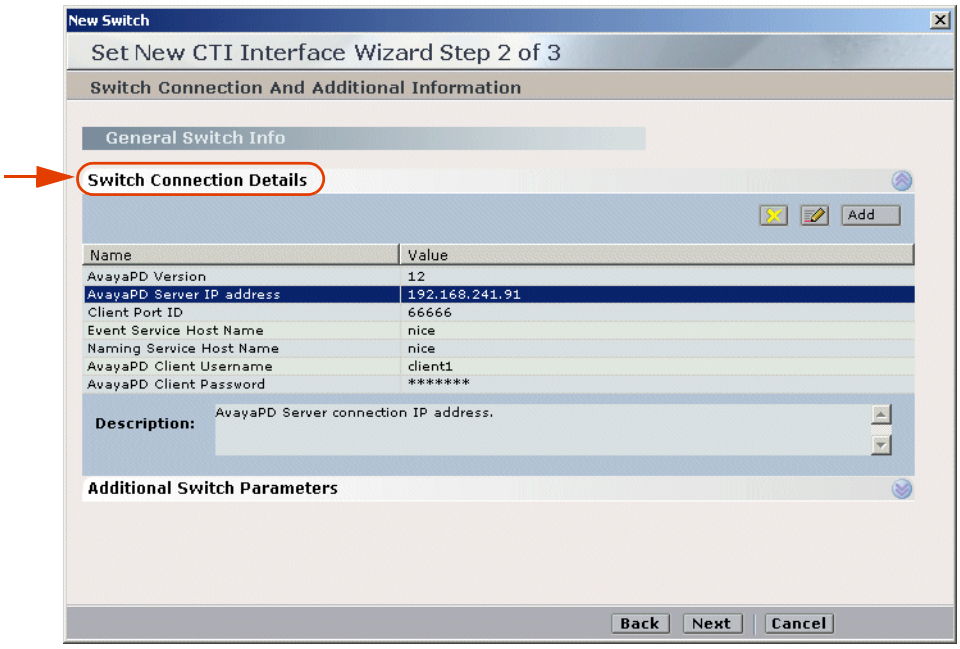
6. Click **Next**. The Set New CTI Wizard Step 2 of 3 window appears displaying the **General Switch Info** section.

Figure 3-6 General Switch Info Section



a. Expand **Switch Connection Details**. The **Switch Connections Details** area appears.

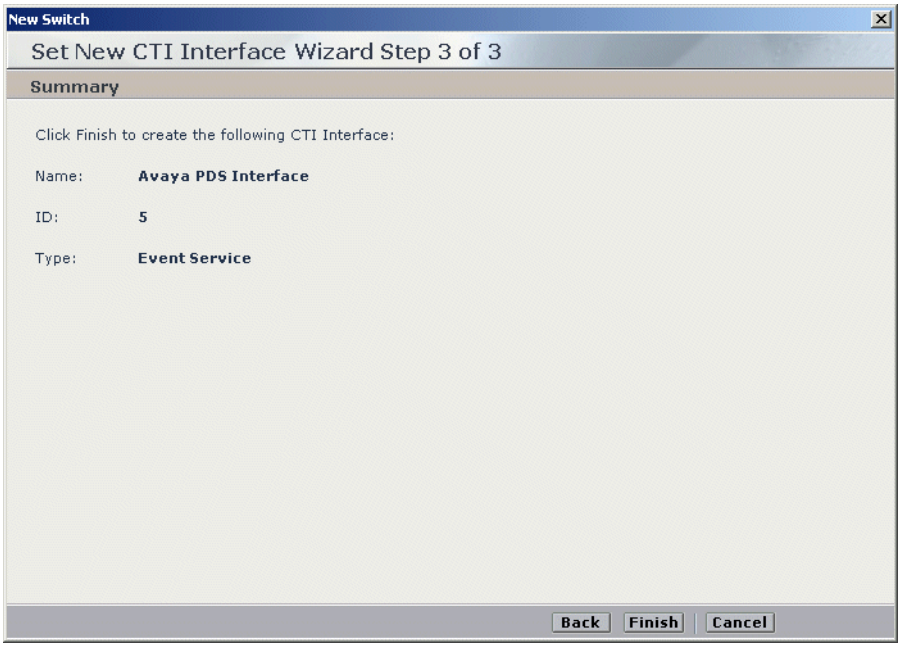
Figure 3-7 Switch Connection Details Area



b. To define the existing parameters or to create new ones, see **CTI Interface - Switch Connection Details Parameters** on **page 98**.

7. Click **Next**. The Summary window appears.

Figure 3-8 Summary Window



8. Click **Finish**. The CTI interface is created.

Configuring the Connection Manager

The Connection Manager is used for creating and maintaining the CTI link. The connection manager is used as a pipeline for transferring information between the interface and the driver/s, once the link is established. One Connection Manager can be used to connect to several Interfaces and can have several Drivers.

After configuring the CTI Interface, you must configure the Connection Manager to the Avaya PD link you created in the CTI Interface.

IMPORTANT

If you are using the Avaya PD switch in conjunction with another integration, you must configure a Connection Manager for each switch.

The Connection Manager module will interface with the switch to receive all of the relevant CTI events and information.

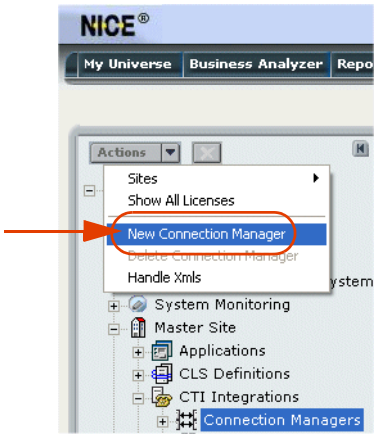
IMPORTANT

To configure the Connection Manager, you must have permission to work in **Technician Mode**, see **Logging in to the System Administrator** on **page 36**. You do not need Technician Mode privileges to view information.

To configure the Connection Manager:

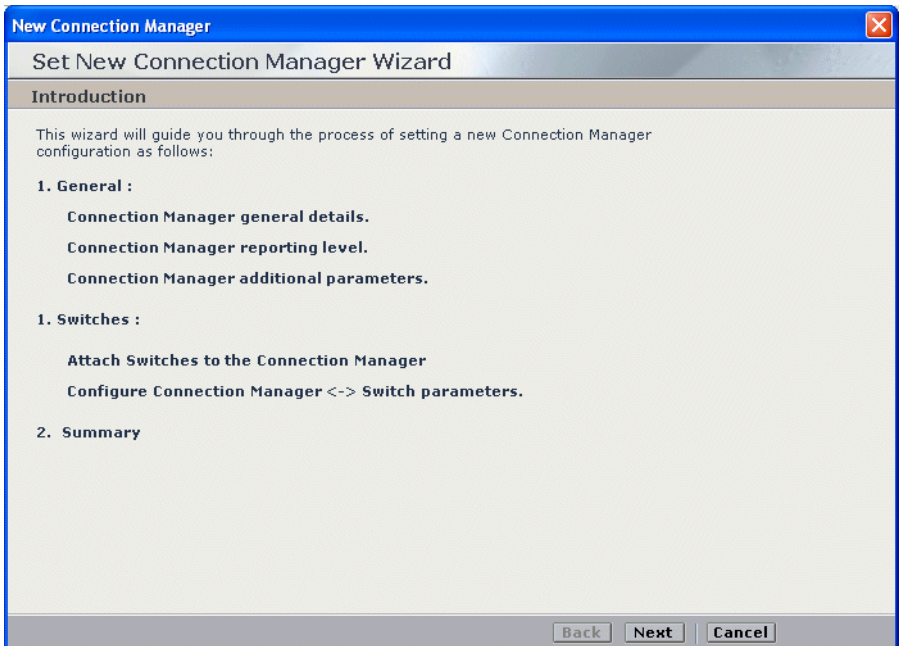
1. In the **Organization** tree, under **Master Site > CTI Integrations**, choose **Connection Managers**.
2. From the **Actions** menu, choose **New Connection Manager**.

Figure 3-9 Actions Menu



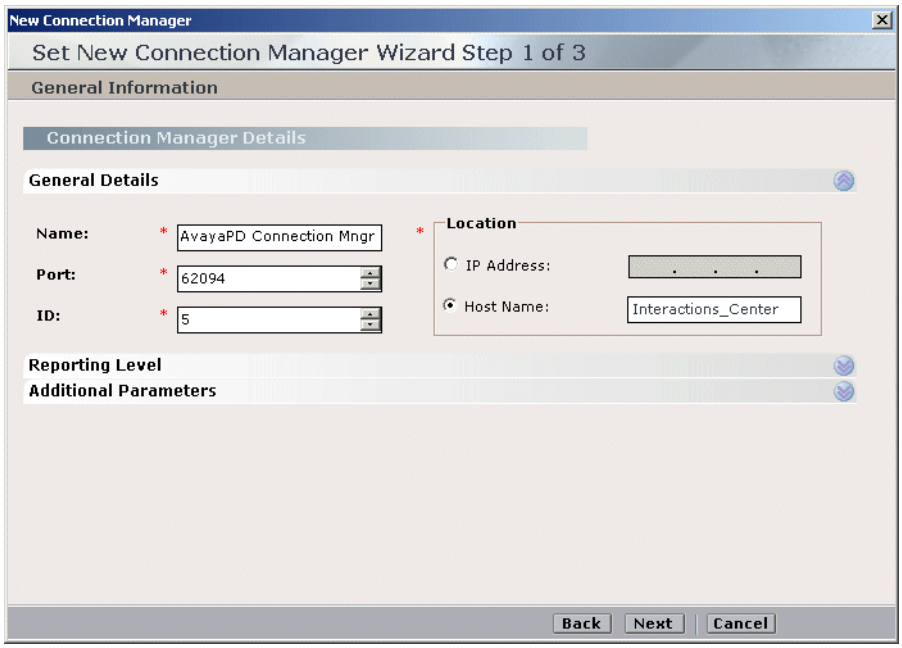
The Set New Connection Manager Wizard starts.

Figure 3-10 Set New Connection Manager Wizard - Introduction Window



3. Click **Next**. The Set New Connection Manager Wizard Step 1 of 3 window appears displaying the **General Details** area.

Figure 3-11 General Details Area



a. In the **Name** field, type the name you want to give the Connection Manager.

b. Accept the default port number.

NOTE: Do not change the default port number.

c. In the **ID** field, type the ID number you want to give the Connection Manager.

d. In the **Location** area, select either the **IP Address** or the **Host Name** of the computer on which the Connection Manager is located.

4. It is recommended to accept the existing defaults for the Connection Manager's **Reporting Levels**.

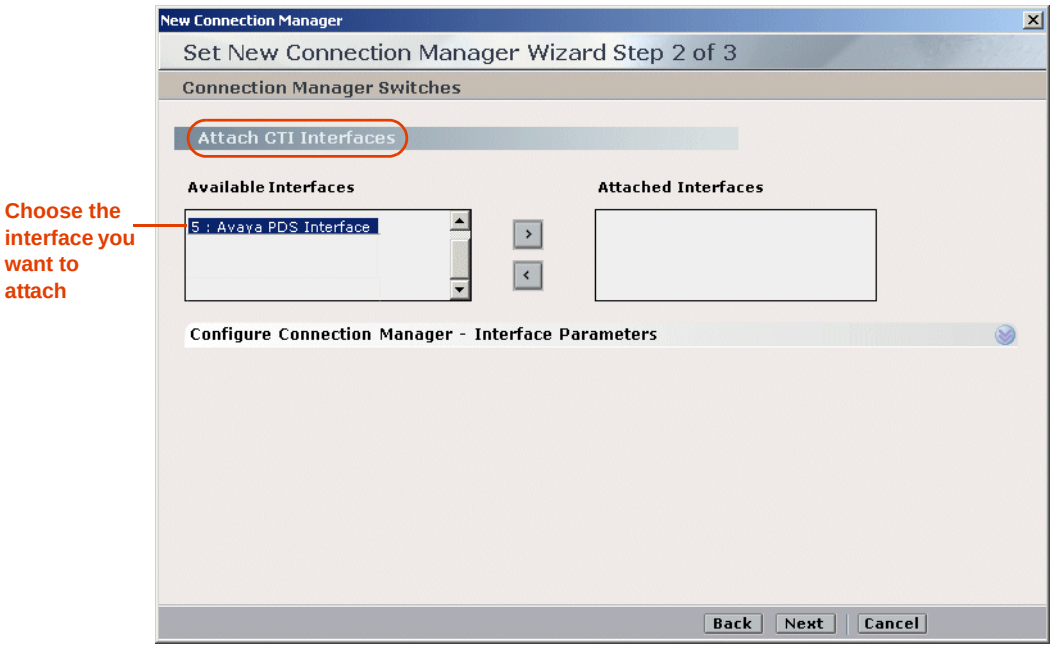
   If it should be necessary to make changes, see **Reporting Levels** on **page 102**.

5. It is recommended to accept the existing defaults for the Connection Manager's **Additional Parameters**.

   If it should be necessary to define existing parameters or to create new ones, see **Connection Manager - Additional Parameters** on **page 104**.

6. Click **Next**. The Set New Connection Manager Wizard Step 2 of 3 window appears displaying the **Attach CTI Interfaces** section.

Figure 3-12 Attach CTI Interfaces Section



All available CTI Interfaces are listed in the **Available Interfaces** list.

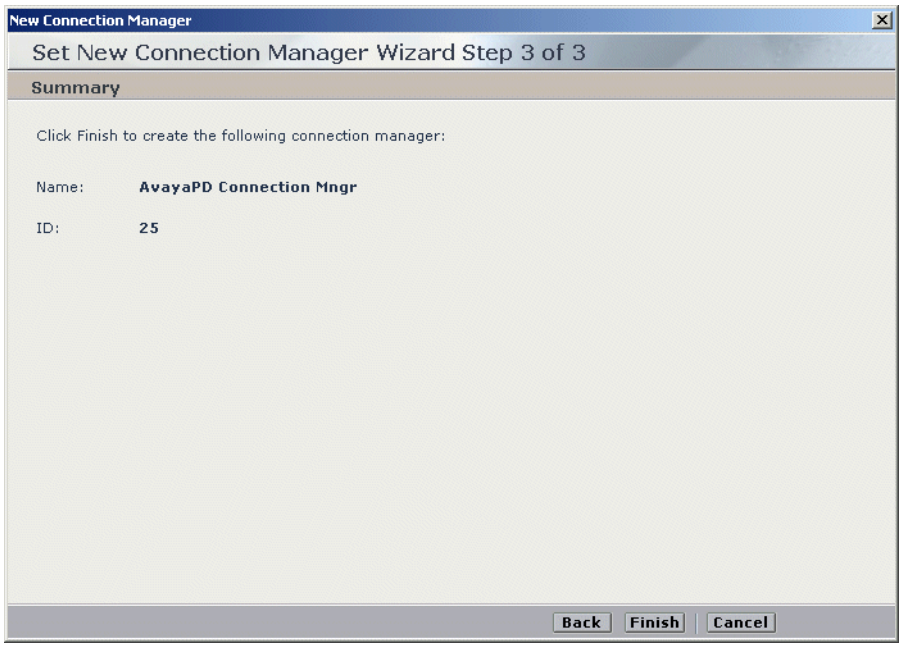
a. Select the interface(s) you want to attach and click the arrow to transfer the interface(s) to the **Attached Interfaces** list.

b. It is recommended to accept the existing defaults for the **Connection Manager - Interface Parameters**.

   If you need to define existing parameters or to create new ones, see **Connection Manager - Interface Parameters** on **page 106**.

7. Click **Next**. The Summary window appears.

Figure 3-13 Summary Window



The Summary window displays the Connection Manager name and ID.

8. Click **Finish** to create the Connection Manager.

Upon completion the System Administrator page reappears and the new Connection Manager appears in the list of Connection Managers.

NOTE: For details pertaining to maintaining or changing the Connection Manager or any of its definitions, refer to the *NICE Perform System Administrator's Guide*.

Defining the Driver

The driver is used to get the actual events from the Interface via the Connection Manager. When the driver receives these events, they are filtered and translated into CAPI commands (start call, end call) or discarded, according to the system configuration (recording rules, CTI analysis installed, and so on).

After configuring the Connection Manager, you create the driver and connect it to the Connection Manager.

IMPORTANT

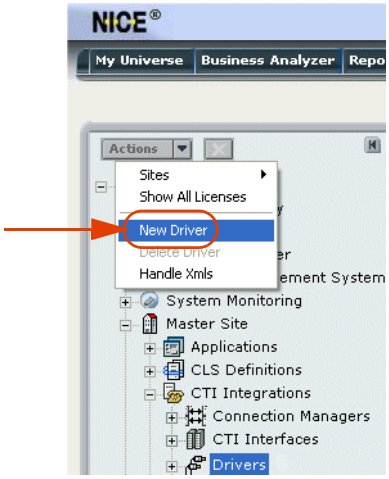
To define the driver, you must have permission to work in **Technician Mode**, see steps 1 through 3 on page 36. You do not need Technician Mode privileges to view information.

NOTE: The driver needs to be associated with a Connection Manager. This is only possible after you have defined the Connection Manager, see Step 9 on page 49.

To create the driver:

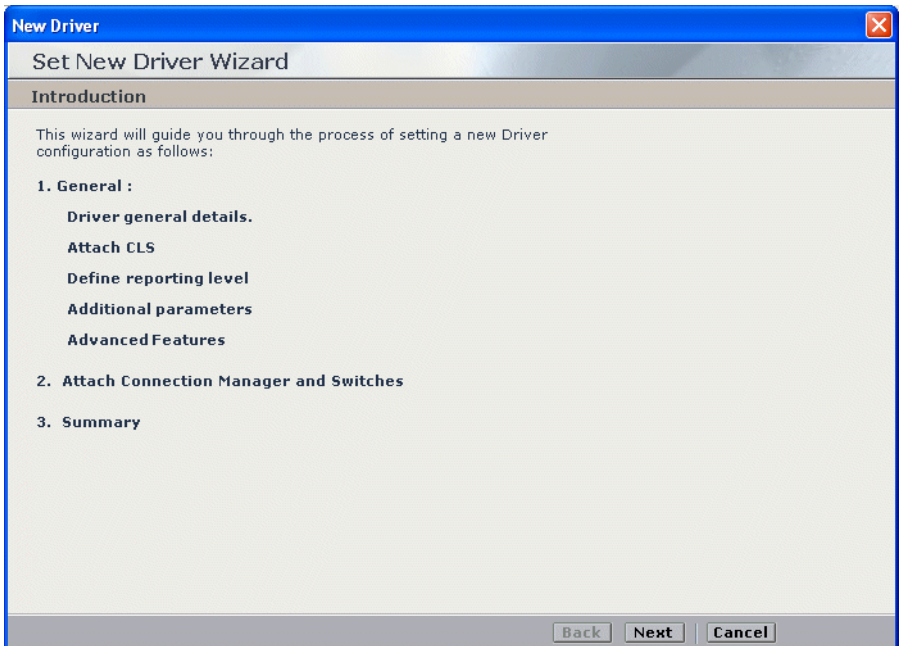
1. In the System Administrator, in the **Organization** tree, navigate to **Master Site > CTI Integrations** and select **Drivers**.
2. From the **Actions** menu, choose **New Driver**.

Figure 3-14 Actions Menu



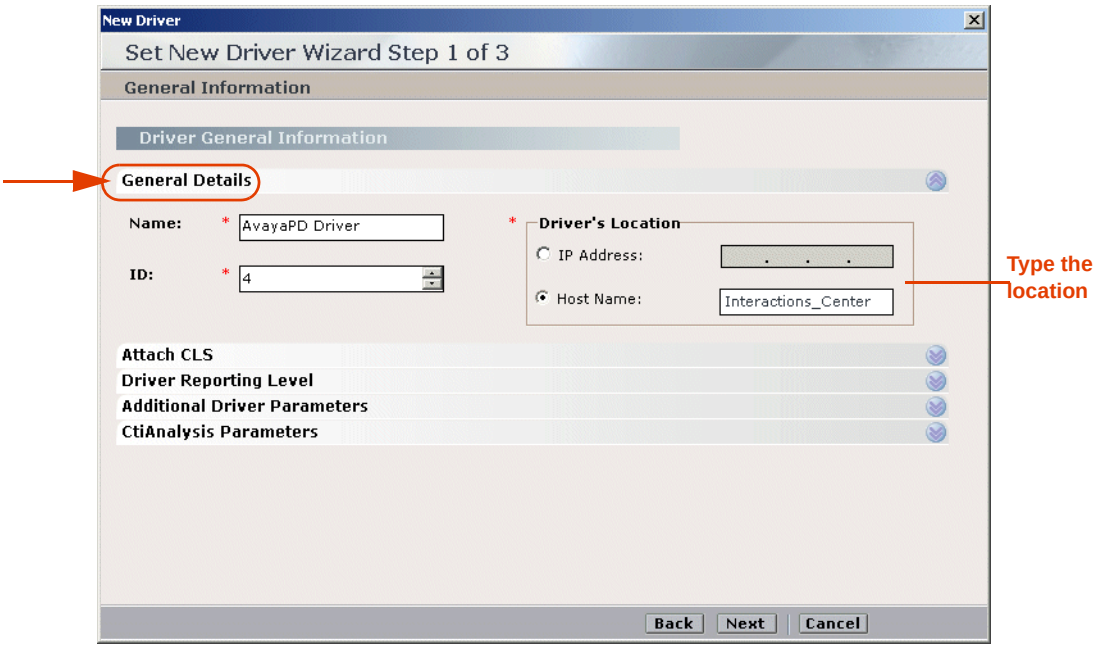
The Set New Driver Wizard starts.

Figure 3-15 Set New Driver Wizard - Introduction Window



3. Click **Next**. The Set New Driver Wizard Step 1 of 3 window appears displaying the **General Details** area.

Figure 3-16 General Details Area



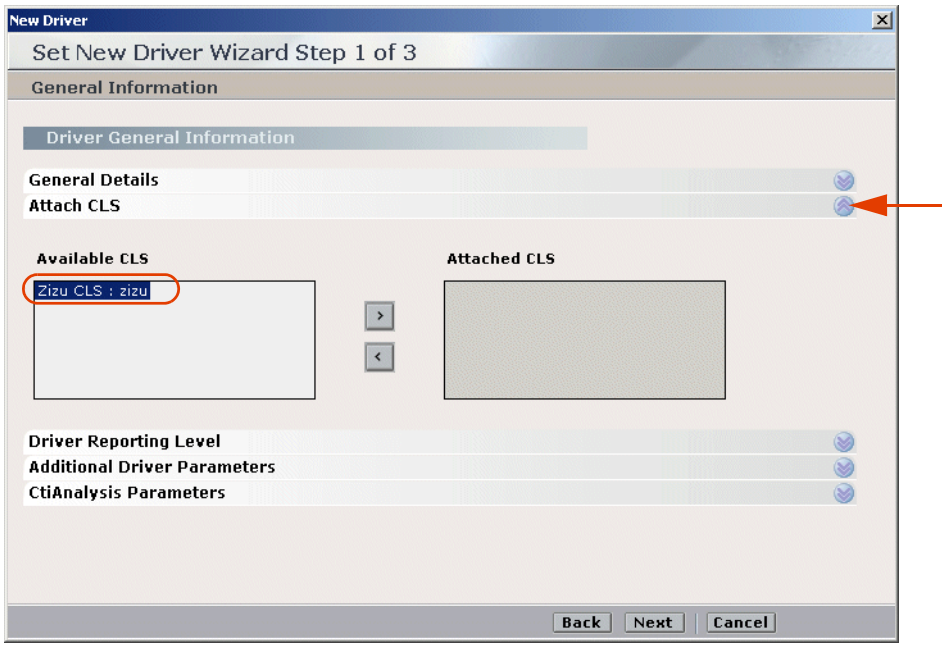
a. In the **Name** field, type the name you want to give the driver.

b. In the **ID** field, type the ID number you want to give the driver.

c. Under **Driver's Location**, select either **IP Address** or **Host Name** and type the computer on which the NICE Integrations are installed.

4. Expand **Attach CLS**. The **Attach CLS** area appears.

Figure 3-17 Attach CLS Area



All available CLS servers are listed in the **Available CLS** list.

5. Select the CLS server(s) you want to attach and click the arrow to transfer the CLS server to the **Attached CLS** list.
6. It is recommended to accept the existing defaults for the new **Driver Reporting Level** parameters.

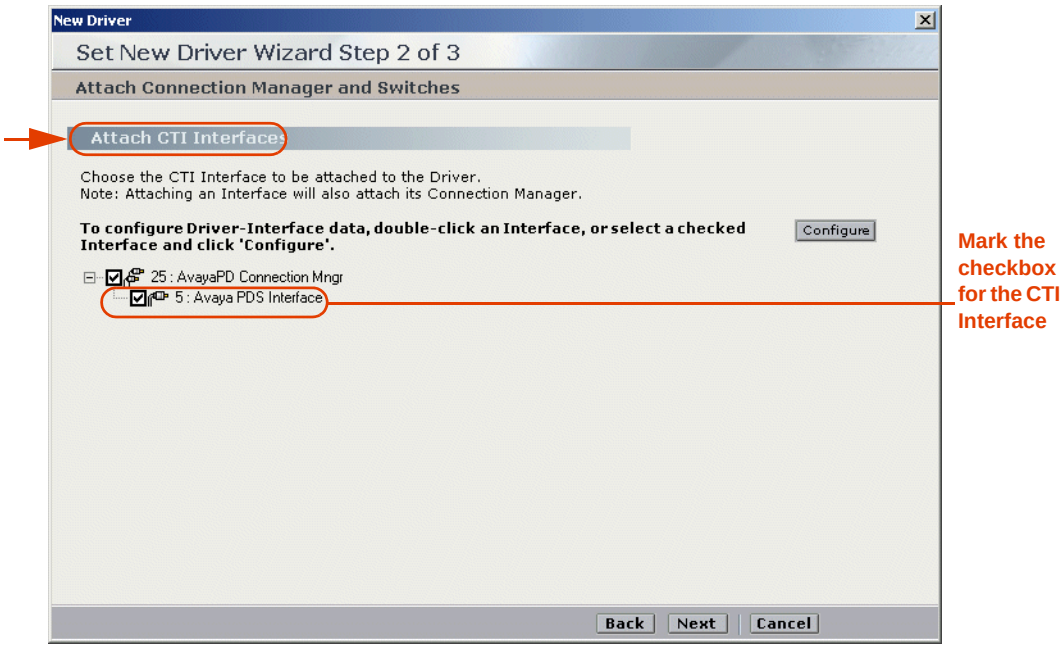
NOTE: Setting up the reporting level is similar for all the different Integration components.

7. It is recommended to accept the existing defaults for the New Driver's **Additional Driver Parameters**.

   If it should be necessary to define existing parameters or to create new ones, see **Driver - Additional Driver Parameters** on **page 109**.

8. Click **Next**. The Set New Driver Wizard Step 2 of 3 window appears displaying the **Attach CTI Interfaces** section.

Figure 3-18 Attach CTI Interfaces Section



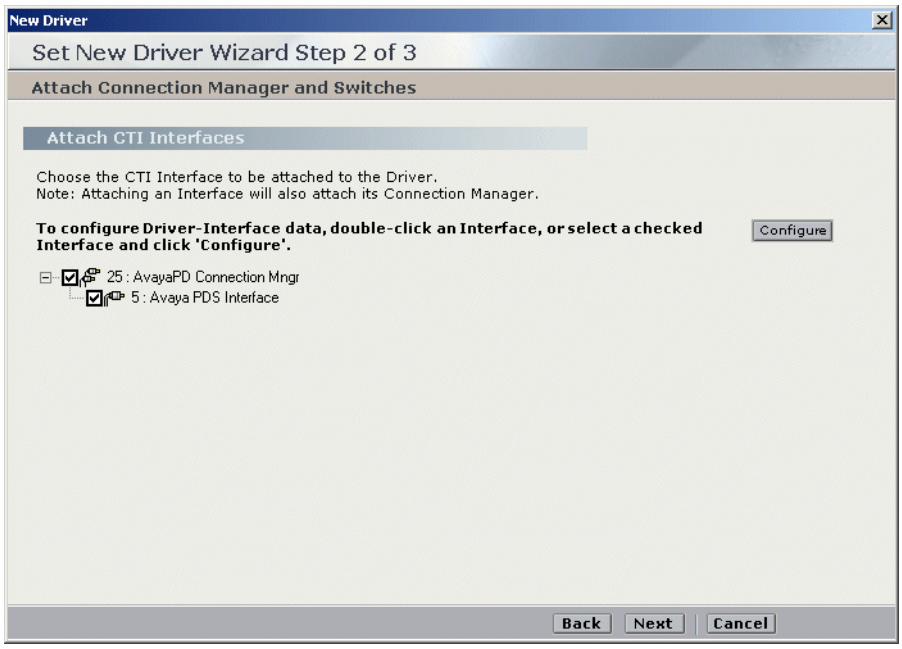
NOTE: After creating the Connection Manager and the driver, you must specify the switch (CTI Server) with which this Connection Manager will be associated. In this case, the Connection Manager will be associated with the Avaya Predictive Dialer CTI interface created previously, see **Configuring the CTI Interface** on **page 36**.

9. **To attach the CTI interface:**

   a. In the **Attach CTI Interfaces** section, mark the checkbox for the CTI Interface you want to attach to this driver.

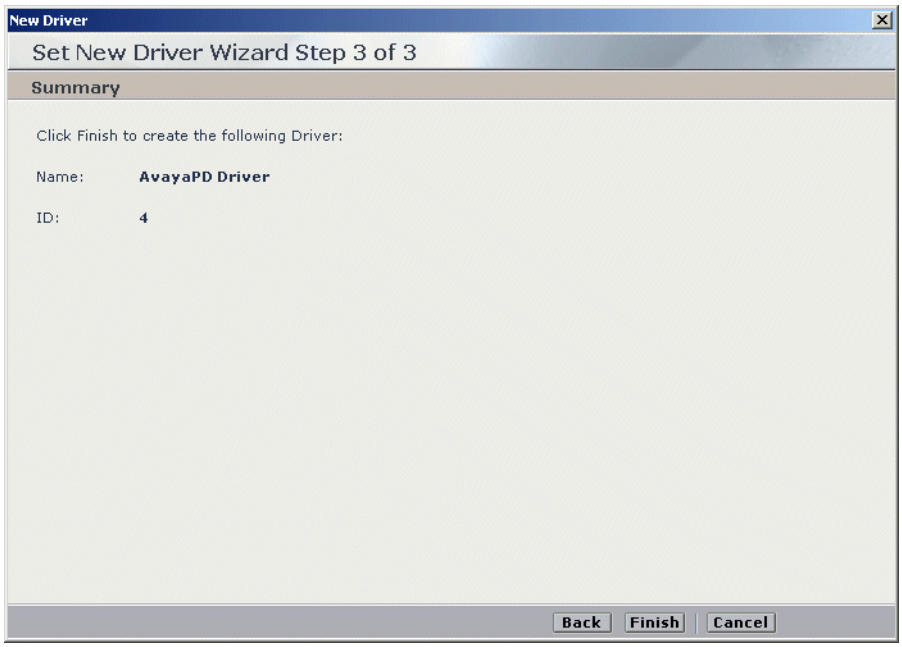
NOTE: When you mark the checkbox for the CTI Interface, the checkbox for the corresponding Connection Manager automatically becomes marked as well. You cannot mark the checkbox of the Connection Manager by itself.

Figure 3-19 Attach CTI Interfaces Section



10. Click **Next.** The Summary window appears.

Figure 3-20 Summary Window



The Summary window displays the driver name and ID.

11. Click **Finish** to create the new driver.The System Administrator page reappears and the new driver appears in the list of drivers.

NOTE: For details pertaining to maintaining or changing the driver or any of its definitions, refer to the *NICE Perform System Administrator's Guide*.

Installing the NICE Integration Software

After performing all the above configurations, you now install the NICE Integration software on the NICE Interactions Center server.

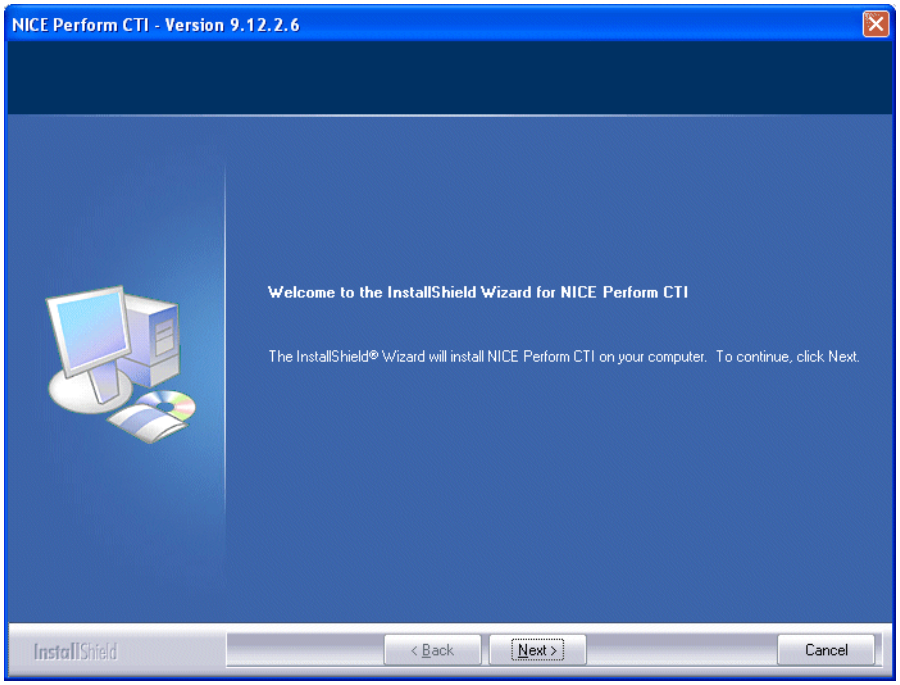
NOTE: The SNMP service must be installed BEFORE you can configure this software.

To install the integration software:

1. Insert the **NICE Perform CTI Integration Suite Installation** CD in the CD-ROM drive.
2. Navigate to the Integration installation program and double-click **Setup.exe**.

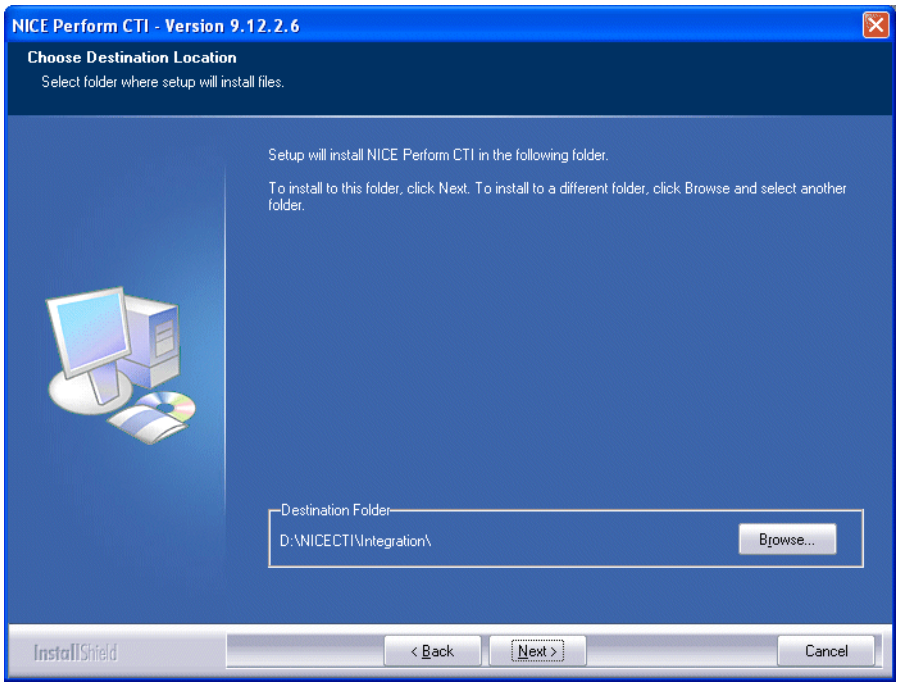
   The NICE Perform CTI Wizard starts.

Figure 3-21 NICE Perform CTI - InstallShield Welcome Window



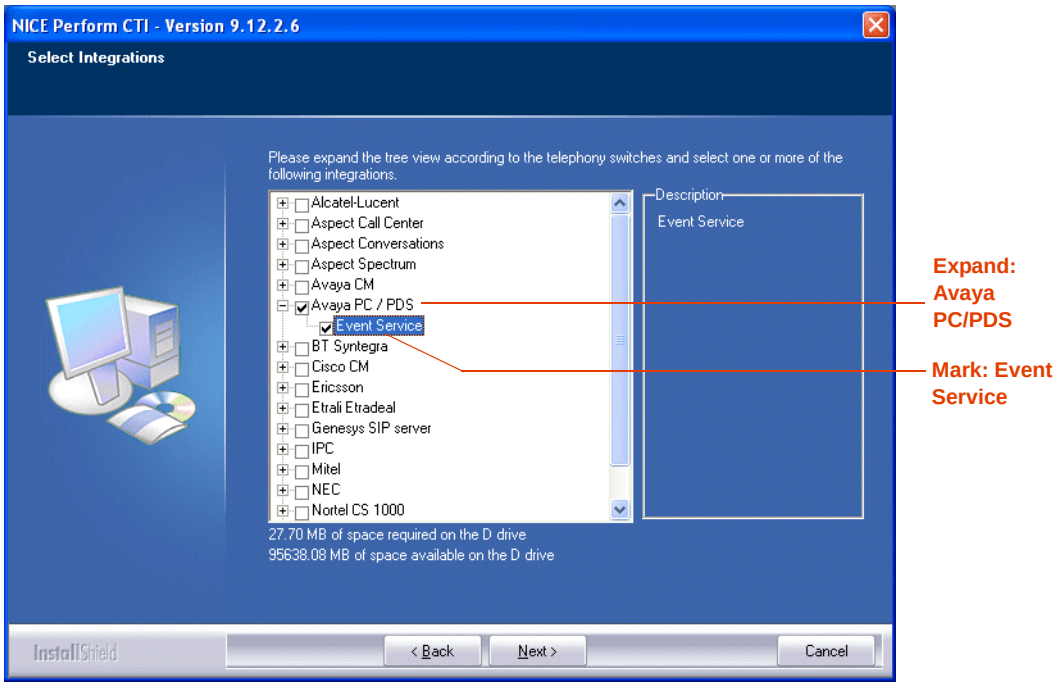
3. Click **Next**. The Choose Destination Location window appears.

Figure 3-22 Choose Destination Location Window



4. To change the default installation path, click **Browse** and select the required path.
5. Click **Next**. The Select Integrations window appears.

Figure 3-23 Select Integrations Window



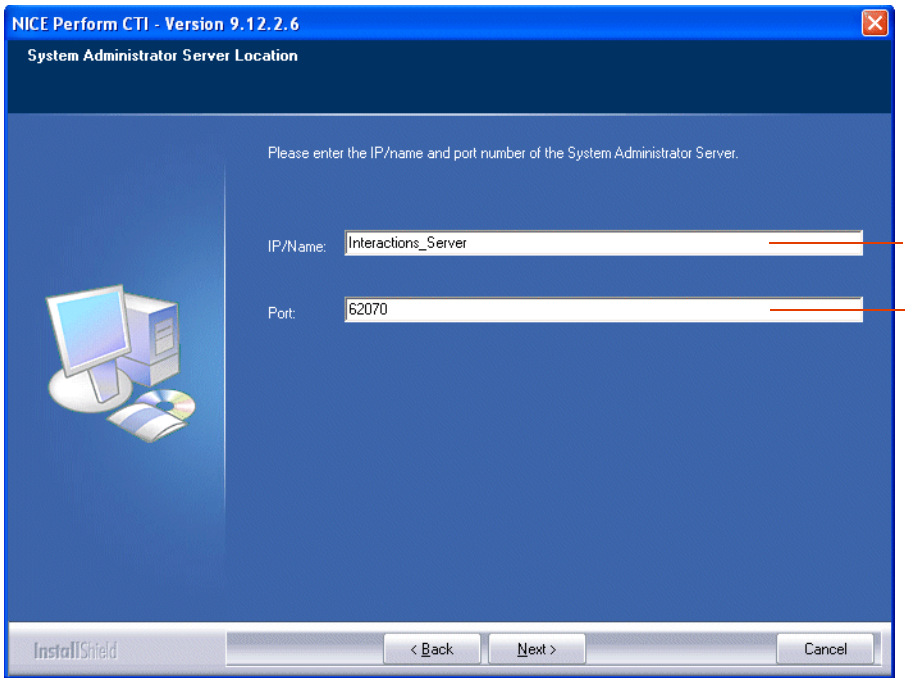
b. Expand **Avaya PC/PDS**.

c. Mark **Event Service**. Both Avaya PC/PDS and Event Service are marked.

d. Click **Next**.

The System Administrator Server Location window appears.

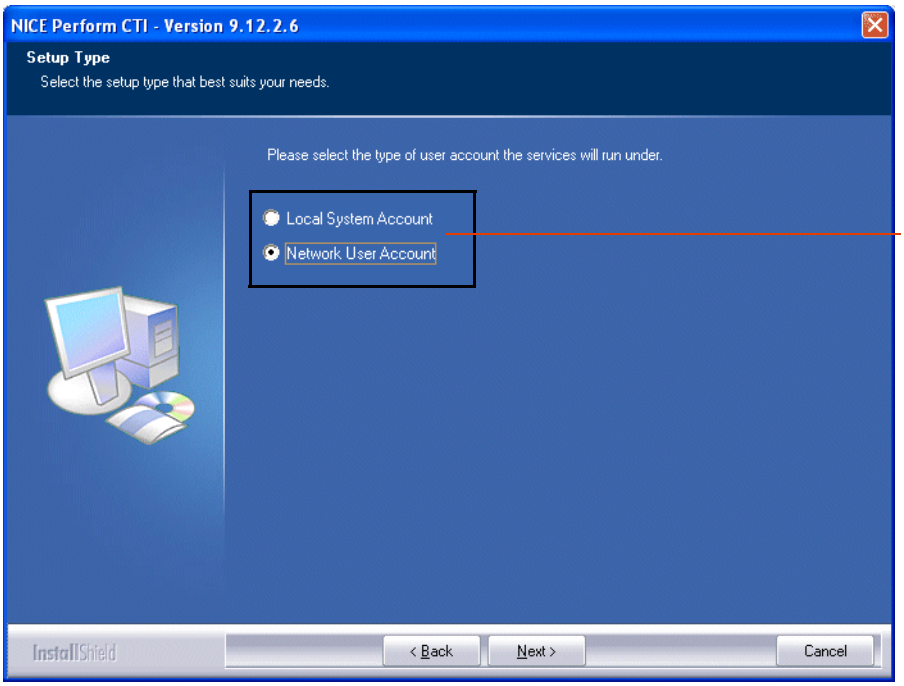
Figure 3-24 System Administrator Server Location Window



The associated **Port** number (**62070**) appears by default.

6. Type the location of the System Administrator service.
7. Click **Next**. The Setup Type window appears.

Figure 3-25 Setup Type Window



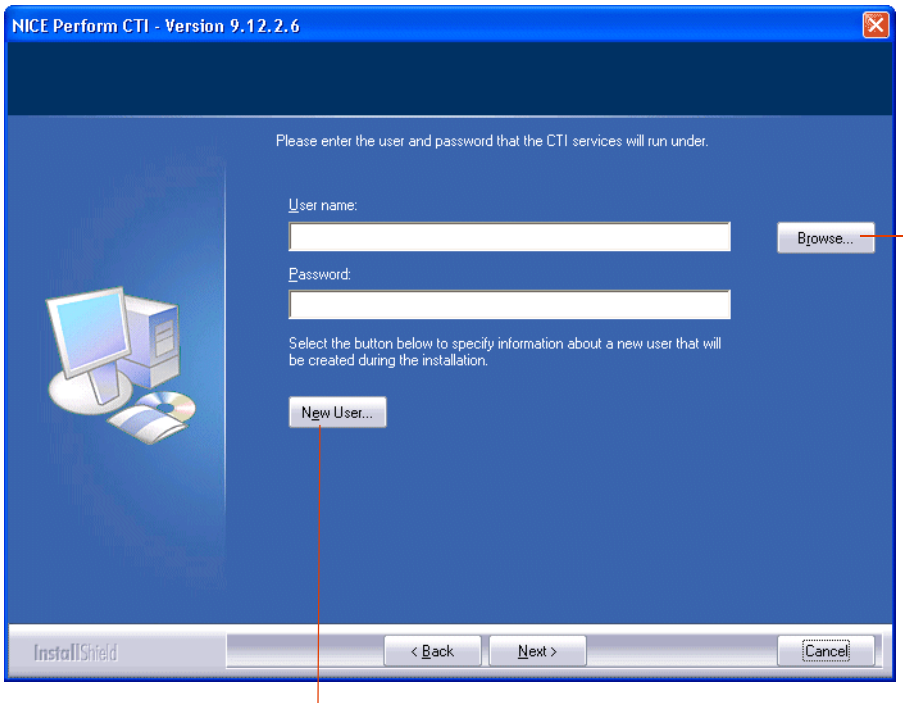
e. *If your site is configured for a network user account*, leave the default setting.

-or-

If you need to configure for a local system account, select **Local System Account**. Continue with **Step 10**.

f. Click **Next**. The Network User Account Setup window appears.

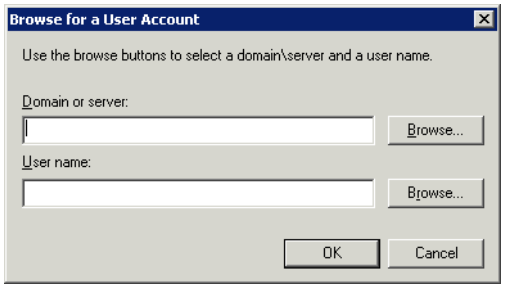
Figure 3-26 Network User Account Setup Window



- *To define an existing network user*, continue with **Step 8**.
- *If no user exists or to add an additional new user*, continue with **Step 9**.

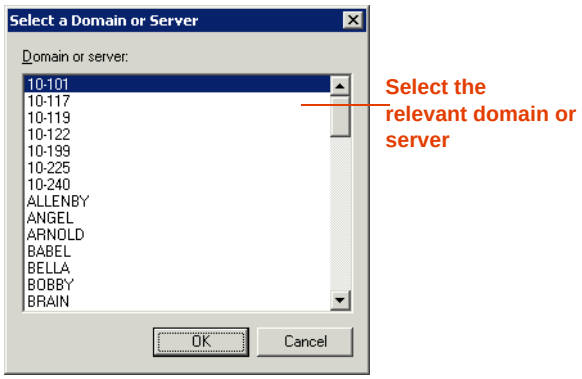
8. *To define an existing network user*, in the **User name** area, click **Browse**. The Browse for a User Account window appears.

Figure 3-27 Browse for a User Account Window



a. In the **Domain or server** area, click **Browse**. The Select a Domain or Server window appears.

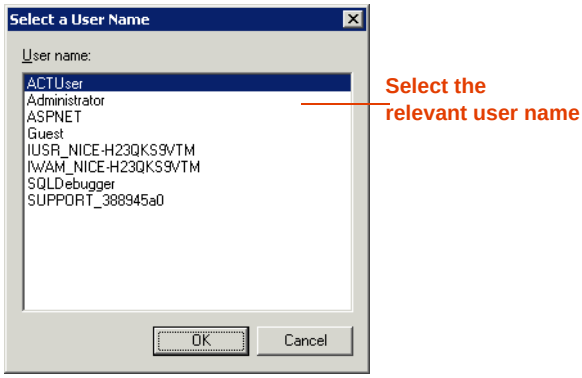
Figure 3-28 Select a Domain or Server Window



b. Select a domain or server and click **OK**.

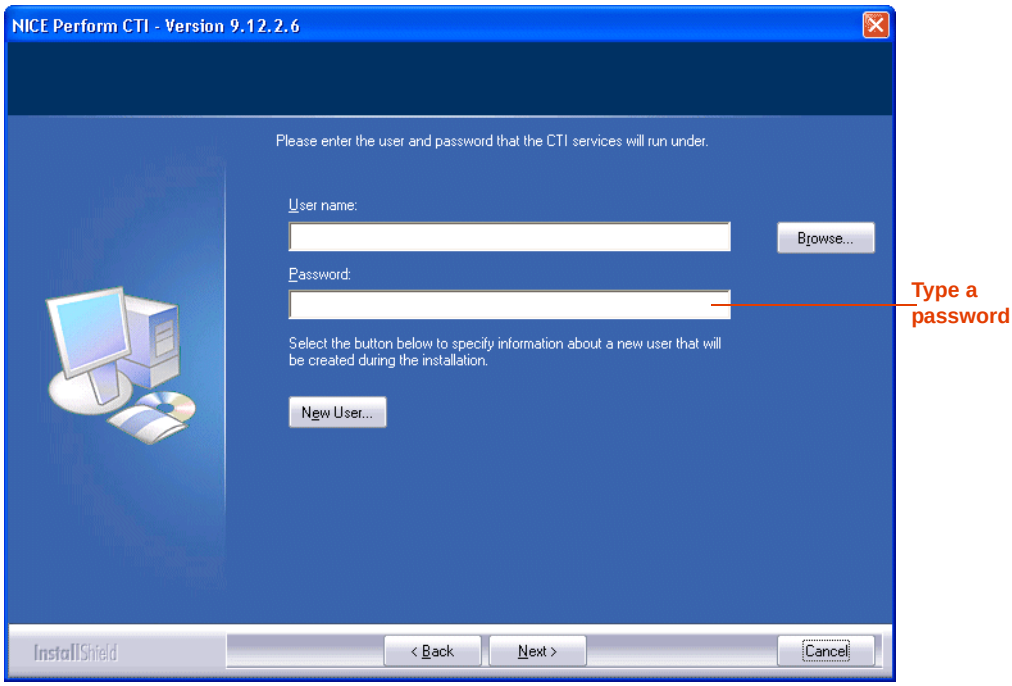
c. In the Browse for a User Account window, in the **User name** area, click **Browse**. The Select a User Name window appears.

Figure 3-29 Select a User Name Window



d. Select a user name, and click **OK**. The Network User Account setup window reappears.

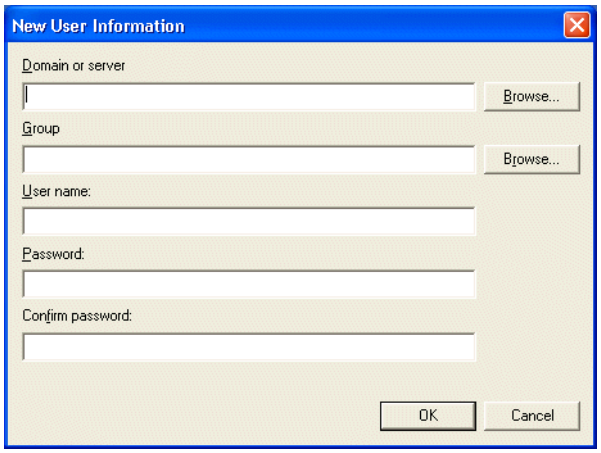
Figure 3-30 Network User Account Setup Window



e. In the Network User Account setup window, in the **Password** field, type the password provided by the site administrator.

9. *If no user exists or to add an additional new user,* click **New User**. The New User Information window appears.

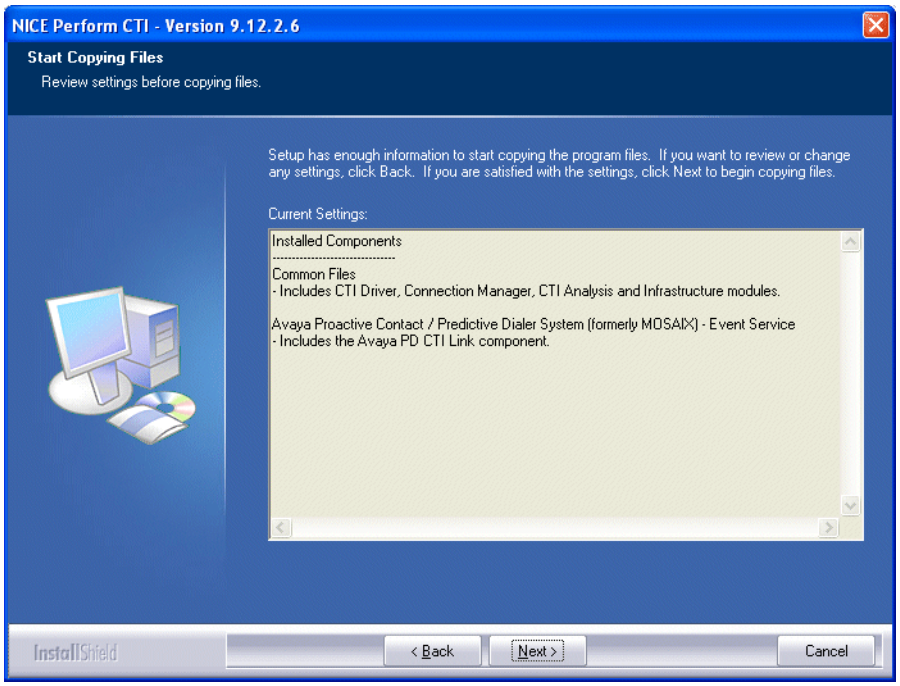
Figure 3-31 New User Information Window



- Complete all fields and click **OK**.

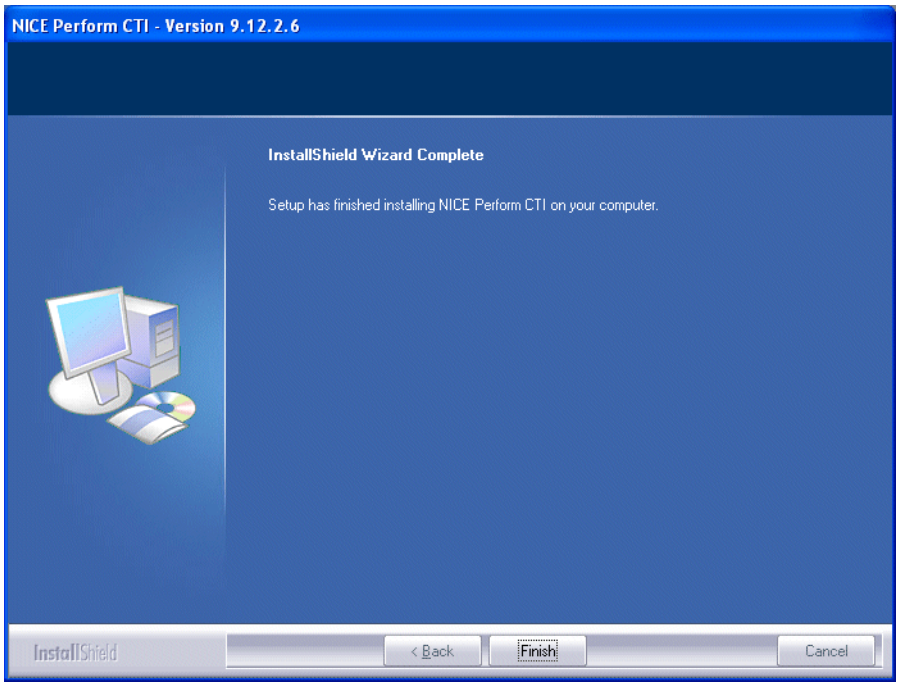
10. Click **Next**. The Start Copying Files window appears.

Figure 3-32 Start Copying Files Window



11. Click **Next**. The InstallShield Wizard Complete window appears.

Figure 3-33 InstallShield Wizard Complete Window



12. Click **Finish**. The Integration package is installed.

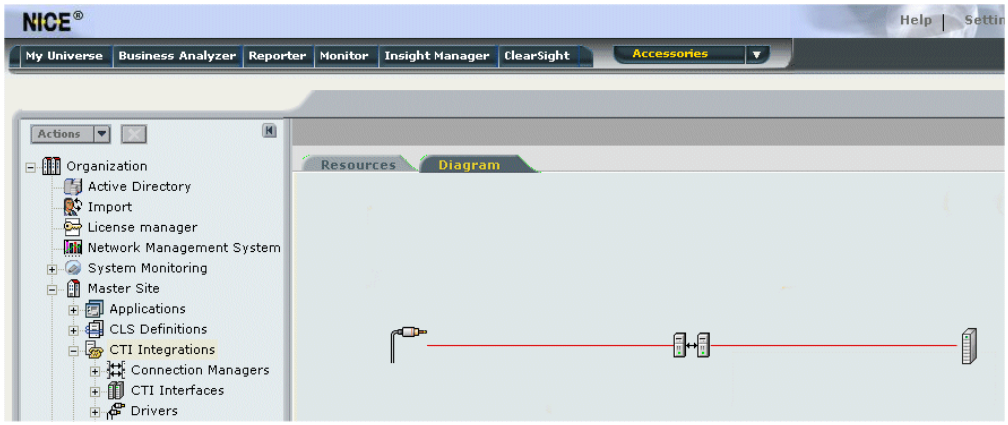
Verifying the CTI Integration

This procedure describes how to verify that all the relevant system components have been attached.

To verify that all system components have been attached:

1. In the System Administrator, in the **Organization** tree, navigate to **Master Site > CTI Integrations** and select **CTI Integrations**.
2. Click the **Diagram** tab. The following diagram appears.

Figure 3-34 CTI Integrations Diagram



NOTE: This diagram only displays the connection layout. IT DOES NOT notify you if the connection between the different components is established or not!

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4

Troubleshooting

This chapter describes the troubleshooting procedures for the NICE Interactions Center and the Avaya PD integration.

Contents

Troubleshooting

The troubleshooting scenarios and solution procedures for the NICE Interactions Center and Avaya PD integration are described below.

Problem: The AvayaPDCTILink is not connecting

Solution:

- Check that all the connection plug-in parameters are correct.

NOTE: The host name fields are case sensitive.

- Verify that you have entered the Event Service host name in the hosts file under c:\Windows\system32\drivers\etc.

NOTE: The hosts file is also case sensitive.

- Make sure that the Naming service and the Event service are up and running and that you can ping them from the NICE Interactions Center server.

Problem: Calls that should have been recorded can not be heard

Solution:

- Check the time synchronization of the different components of your system. Particularly make sure that the time on the computer on which you are attempting to listen to the call is synchronized with the time of the NiceLog Logger.
- Check your mapping in the channel mapping.

5

NICE Testing and Debugging Tools

This chapter describes several NICE testing and debugging tools which enable you to troubleshoot your site. Use the different tools to help you isolate problems.

NOTE: All these tools should *only* be used by authorized personnel and in conjunction with NICE Systems.

Contents

NICE Events Spy

NICE Events Spy enables you to trace events after they were transferred from the PABX to the Connection Manager, enabling you to detect bugs or malfunctions.

WARNING

Using the NICE Events Spy can greatly increase the load on your system. The **UseSpy** parameter default is therefore **No**. Using the NICE Events Spy and changing the parameters should be performed only by authorized personnel and in conjunction with NICE Customer Support.

Setting Up the Events Spy

The NICE Events Spy tool is part of the NICE Perform Applications Suite.

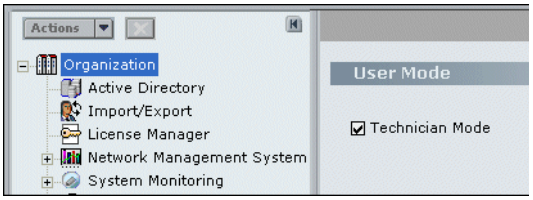
To set up the NICE Events Spy Tool:

1. Open the System Administrator, as follows:
   a. Login to the NICE Perform Applications Suite.
   b. From the **Accessories** menu, choose **System Administrator**.

   The System Administrator appears with a list of NICE components under the **Site** branch in the **Organization** tree.

   To add components in the System Administrator, you must work in Technician Mode.

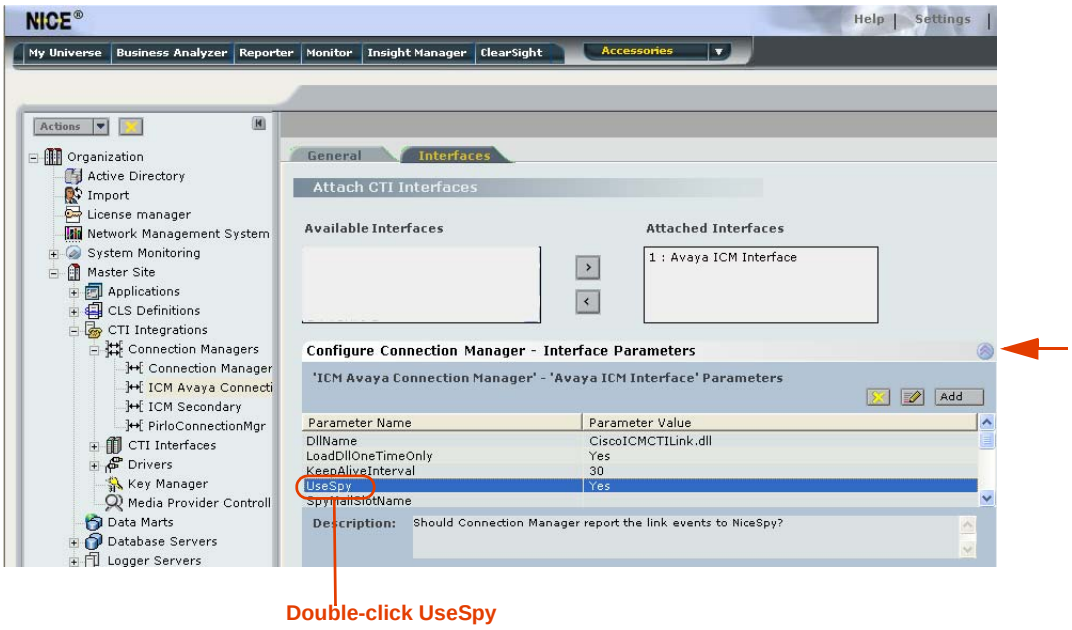
2. Set the System Administrator to Technician Mode:
   a. In the Organization Tree, select the **Organization** branch.



   b. Mark the **Technician Mode** checkbox and click **Save** .

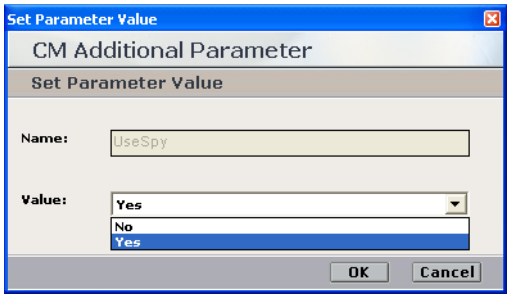
3. In the **Organization** tree, navigate to **Master Site > CTI Integrations > Connection Managers**. Choose the Connection Manager for which you want to set up the NICE Events Spy tool.
4. Click the **Interfaces** tab and expand **Configure Connection Manager - Interface Parameters**.

Figure 5-1 Interfaces Tab



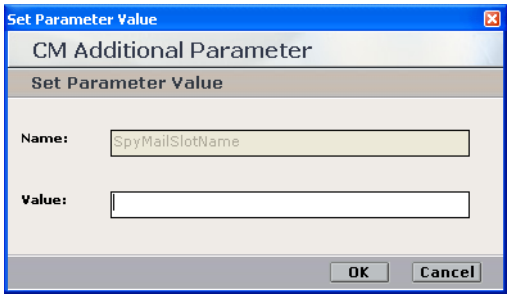
5. Double-click the **UseSpy** parameter. The Set Parameter Value window appears.

Figure 5-2 Set Parameter Value Window



6. From the **Value** drop-down list, choose **Yes** and click **OK**.
7. Double-click the **SpyMailSlot Name** parameter. The Set Parameter Value window appears.

Figure 5-3 Set Parameter Value Window



8. In the **Value** field, type the name of the mailslot that you want to use in conjunction with NICE Events Spy.

TIP: It is recommended to use a short name.

9. Click **OK**.

NOTE: If the Connection Manager is running, you should restart it after setting these definitions.

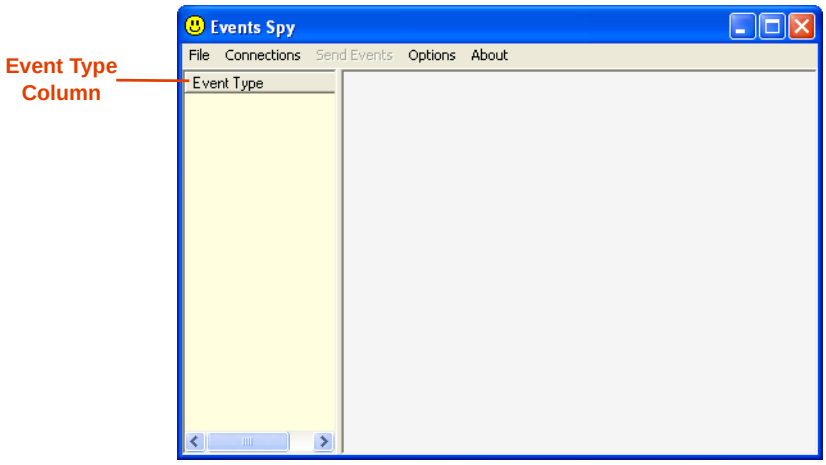
Receiving Events

You should set up the Events Spy so that you can receive events.

To use NICE Events Spy:

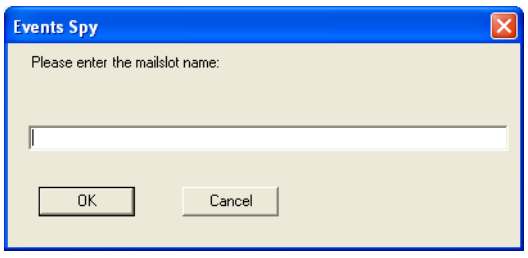
1. On the Interaction Center server, navigate to the **Integrations** folder (the default location is **D:\NICECTI\Integrations**). Double-click **EventSpy.exe**. The Events Spy window appears.

Figure 5-4 Events Spy Window



2. From the **Connections** menu, choose **Mailslot Connections for Receiving Events > Open Mailslot**. The Events Spy - Mailslot Name window appears.

Figure 5-5 Events Spy - Mailslot Name Window



3. Type the name of the mailslot you defined in setting up the NICE Events Spy tool. Click **OK**.

The Events Spy begins to receive events from the switch. The events are listed in the **Event Type** column of the Events Spy window, see **Figure 5-4**.

Saving Events

NICE Events Spy enables you to:

- Create and save events in an active log file.
- Save all current events.
- Save selected current events.

You can save the files in either **.xml** or **.bin** formats.

Saving Events in a Log File

This option enables you to create a log file that saves all events from the time you create the file until you close it.

To save events in a log file:

1. From the **File** menu, choose **Log to File**.
2. To create a log file using the **.xml** format, click **Log to XML File**. To create a log file using the **.bin** format, click **Log to Binary File**. The Save as window appears.
3. Save the file in any convenient location.

NOTE: To view the contents of any of the log files you created, from the **File** menu click **Open Log File**.

Saving Current Events

This option enables you to create a file in which you can save all events that currently appear in the **Event Type** column.

To save current events:

1. From the **File** menu, choose **Save Current Events to File**.
2. To create a file using the **.bin** format, click **Save all Events to Binary File**. To create a file using the **.xml** format, click **Save all Events to XML File**. The Save as window appears.
3. Save the file in any convenient location.

Saving Selected Current Events

This option enables you to create a file in which you can save selected events from the list that currently appears in the **Event Type** column.

To save selected current events:

1. Select the events you want to save, clicking the events while holding down the <**Ctrl>** key.
2. From the **File** menu, choose **Log to File**.
3. To create a file using the **.bin** format, click **Save Only Selected Events to Binary File**. To create a file using the **.xml** format, click **Save Only Selected Events to XML File**. The Save as window appears.
4. Save the file in any convenient location.

Setting up the SimCTILink Tool

The SimCTILink tool simulates the transfer of events to the Connection Manager as if they originated in the PABX. This enables you to save and analyze them without having to actually use the PABX itself.

WARNING

Use of the SimCTILink tool must be coordinated in advance with NICE Systems and must be performed only by authorized personnel. **DO NOT** attempt to use this tool on your own.

You must therefore leave the parameter default value as **No** unless specifically instructed to do so by NICE Customer Support.

Sending Events

WARNING

You can send events to NICE Systems using the Events Spy window. Sending events is only done when using the SimCTILink tool, and must be coordinated in advance with NICE Customer Support.

NICE Debug Service

The Debug Service enables you to gather data critical for solving problems stemming from the transfer of events between the switch and the Connection Manager.

IMPORTANT

Do not attempt to solve bugs or other problems yourself. Use the Debug Service in coordination with NICE Systems to gather the data as described below, and then send it to NICE Customer Support for assistance.

This section includes the following topics:

- Setting Up the NICE Debug Service
- Accessing the NICE Debug Service

Setting Up the NICE Debug Service

The Debug Service enables developers and customer support personnel to reproduce problematic scenarios.

WARNING

Using the Debug Service can greatly increase the load on your system. The DebugServiceMode parameter default is therefore **Idle**. Using the Debug Service and changing the parameters should be performed only by authorized personnel and in conjunction with NICE Customer Support.

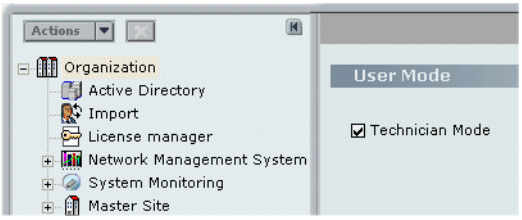
To set up the Debug Service:

1. Open the System Administrator, as follows:
   a. Login to the NICE Perform Applications Suite.
   b. From the **Accessories** menu, choose **System Administrator**.

   The System Administrator appears with a list of NICE components under the **Site** branch in the **Organization** tree.

   To add components in the System Administrator, you must work in Technician Mode.
2. Set the System Administrator to Technician Mode:

a. In the Organization Tree, select the **Organization** branch.

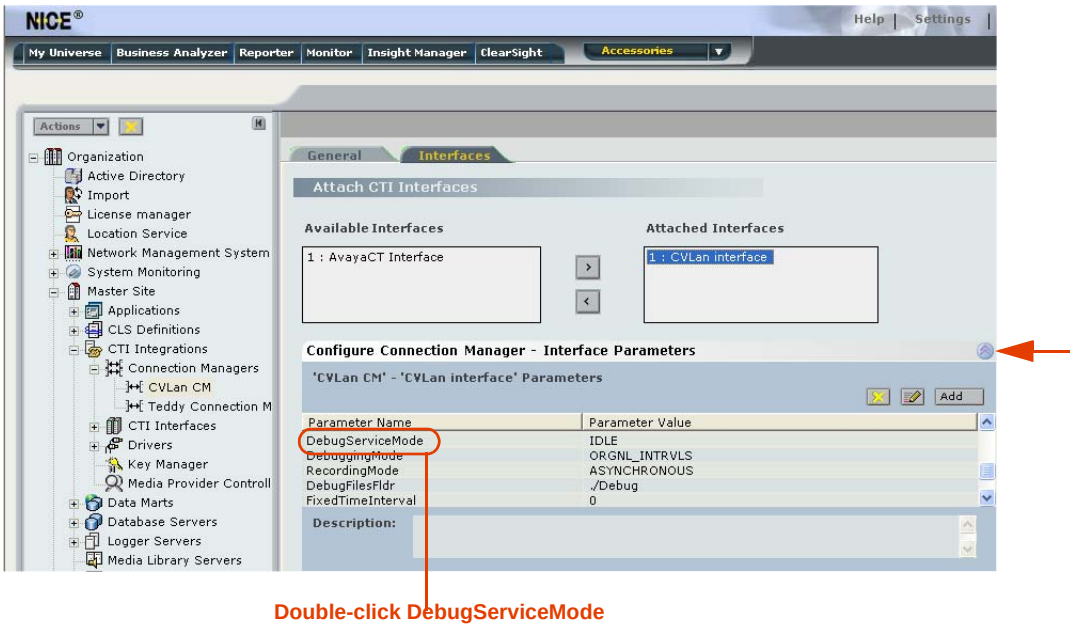


b. Mark the **Technician Mode** checkbox and click **Save** .

3. In the **Organization** tree, navigate to **Master Site > CTI Integrations > Connection Managers**. Choose the Connection Manager for which you want to set up the Debug Service.

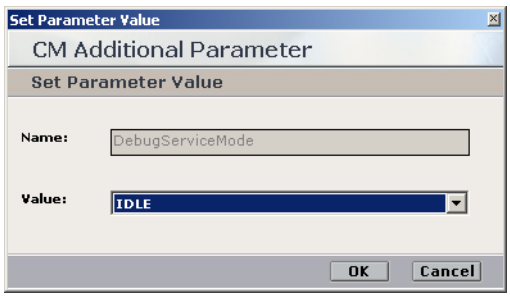
4. Click the **Interfaces** tab and expand **Configure Connection Manager - Interface Parameters**.

Figure 5-6 Interfaces Tab



5. Double-click the **DebugServiceMode** parameter. The Set Parameter Value window appears.

Figure 5-7 Set Parameter Value Window



6. From the **Value** drop-down list, choose either **Record** or **Debug** (see following table) and click **OK**.
7. Define the Debug Service parameters according to the following table:

NOTE: You can also create and add additional parameters by clicking **Add**.

Table 5-1: Debug Service Parameters

Parameter Name	Description	Default Value
DebugServiceMode	• **Idle** - the Debug Service is disabled. • **Record** - the CTI Interface records every event, request, and response. • **Debug** - the CTI Interface receives events, requests, and responses directly from the Debug Service (to be used only by NICE System personnel in lab environments).	Idle
DebuggingMode	• **Orignl_Intrvls** - retains the original intervals between events that were used by the switch. • **Fixed_Intrvls** - events are transferred to the link at fixed intervals, which are defined in the **FixedTimeInterval** parameter. • **Single_Step** - events are transferred upon user input. **NOTE**: This parameter is activated only when you activate the DebugServiceMode.	Single_step
RecordingMode	• **Asynchronous** - synchronization of the requests and responses by the InvokeID is defined by the switch. *Not applicable to TAPI.* • **Semi_Synchronous** - synchronization of the requests and responses by the InvokeID is defined by the Debug Service. *Not applicable to TAPI.* • **Simple** - No synchronization is performed. **NOTE**: This parameter is activated only when you activate the DebugServiceMode.	Asynchronous

Table 5-1: Debug Service Parameters (Continued)

Parameter Name	Description	Default Value
DebugFilesFldr	Defines the folder in which the files created by the Debug Service are saved. **NOTE:** • It is highly recommended to delete the contents of the Debug folder before activating the Debug Service. • This parameter is activated only when you activate the DebugServiceMode. • The files are saved in binary format.	Debug
FixedTimeInterval	Defines the value when you define **Fixed_Intrvls** as the value for the **DebuggingMode** parameter above. **NOTE:** • The value is defined in seconds. • This parameter is activated only when you activate the DebugServiceMode.	0
AvailableDiskQuota	Defines the maximum size allowed on the hard disk for the Debug file you defined in the **DebugFilesFldr** above. • The value is defined in MB. • This parameter is activated only when you activate the DebugServiceMode.	300

8. To activate the Debug Service after you have defined the above parameters, close the Connection Manager process in the Interaction Center server. The Debug Service is activated when the Dispatch Service automatically restarts the Connection Manager process.

9. The Debug Service transfers the event data to the file you defined in the **DebugFilesFldr** above.

   For each debug session, the Debug Service automatically creates four debug files:

   e_xxxxxxxxxx.dbg

   e_xxxxxxxxxx.ndx

   r_xxxxxxxxxx.dbg

   r_xxxxxxxxxx.ndx

   in which "***xxxxxxxxxx***" is the unique debug session identifier. The folder to which the above files are transferred is located in **D:\NICECTI\Integrations\Debug** (default), or in the location you defined in the **DebugFilesFldr** parameter above.

IMPORTANT

You must send all four Debug files to NICE Customer Support. If any one of the Debug files is missing, the scenario cannot be reconstructed.

NOTE: To avoid confusion with any Debug files from previous sessions, it is highly recommended to delete all existing Debug file(s) before activating the Debug Service.

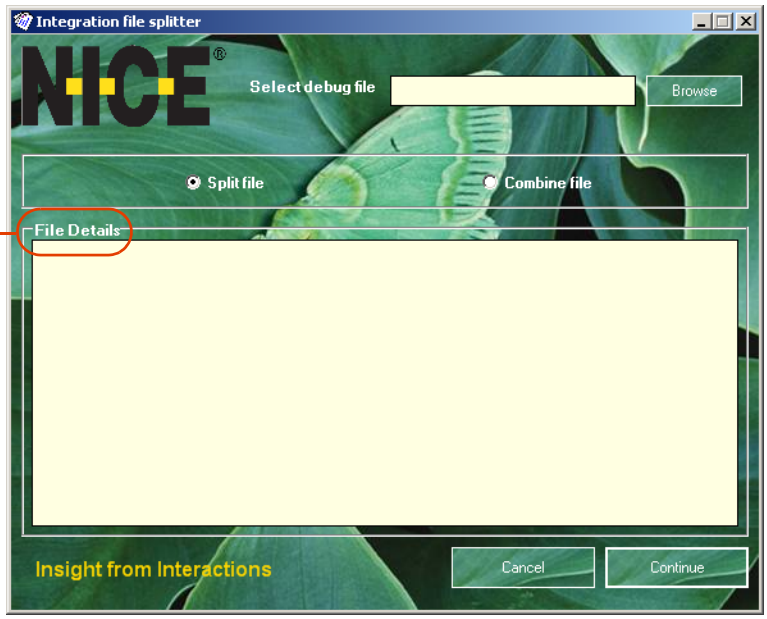
Accessing the NICE Debug Service

NICE Systems provides a utility for viewing the Debug files. You then send the four Debug files to NICE Customer Support.

To access the Debug files:

1. In the Interaction Center, navigate to the **Integrations** folder (the default location is **D:\NICECTI\Integrations**).
2. In the **Tools** folder, double-click **IntegrationFileSplitter.exe**. The Integration File Splitter window appears.

Figure 5-8 Integration File Splitter Window



3. Drag and drop the Debug files into the **File Details** area. The Debug files and the debug session identifier numbers appear in the **File Details** area.
4. When necessary, you can open and view the contents of the .dbg files.

IMPORTANT

Make sure that you send to NICE Customer Support the four debug files that correspond to the debug session ID number.

Connection Manager Monitor

The NICE Connection Manager Monitor tool enables you to view the contents of the Connection Manager's tables. It also enables you to verify if:

- Devices are monitored
- Monitored devices are filtered

  and

- Displays the loaded CTI links
- Displays connected clients.

Your next step is to connect the Connection Manager Monitor tool to the Connection Manager as a client. It then receives events in addition to monitoring devices, enabling you to conduct simple tests without running a driver.

This section includes:

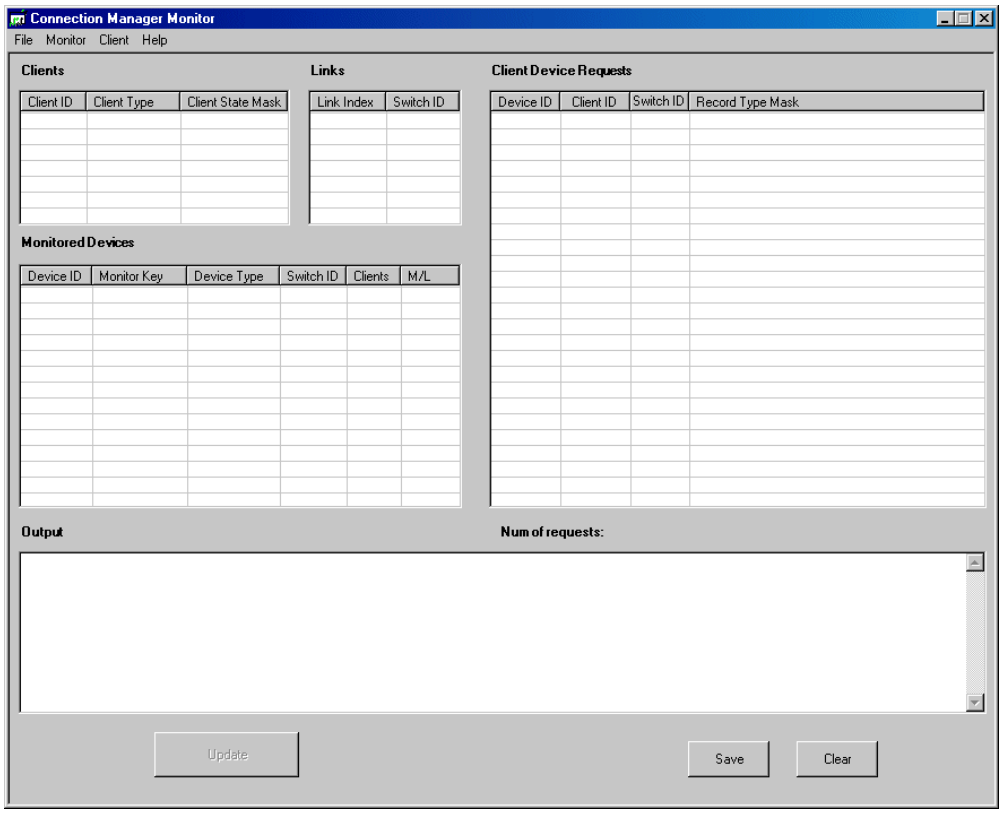
Setting Up the Connection Manager Monitor

To set up the Connection Manager Monitor, follow the procedures below.

To set up Connection Manager Monitor:

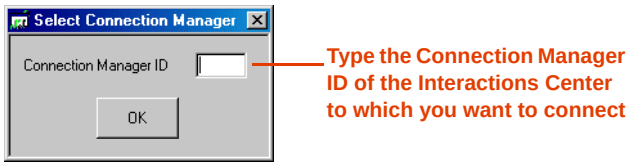
1. In the Interactions Center, navigate to the **Integrations** folder (the default location is **D:\NICECTI\Integrations**). Double-click **ConnectionManagerMonitor.exe**. The Connection Manager Monitor window appears.

Figure 5-9 Connection Manager Monitor Window



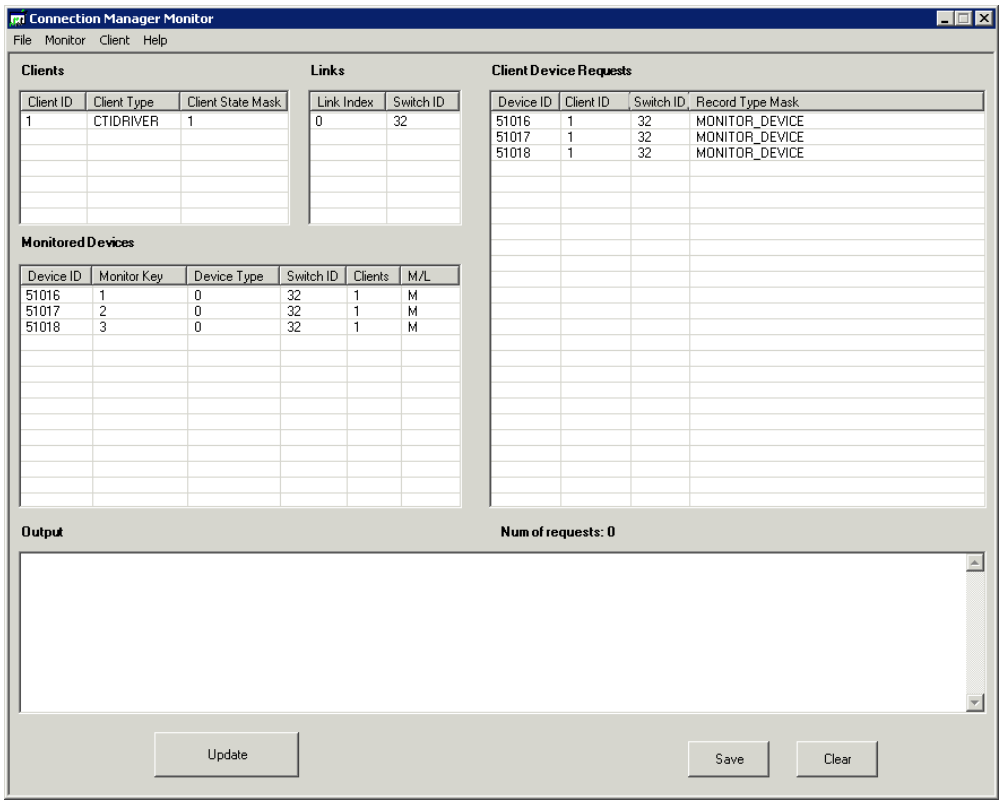
2. From the **Monitor** menu, choose **Connect**. The Select Connection Manager window appears.

Figure 5-10 Select Connection Manager Window



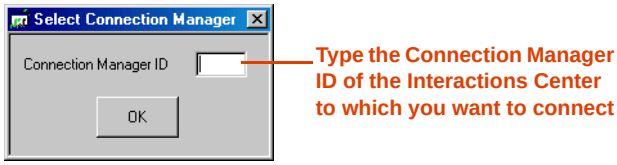
3. Type the **Connection Manager ID** of the Interactions Center to which you want to connect. Click **OK**. The Connection Manager Monitor displays the contents of the Connection Manager tables.

Figure 5-11 Connection Manager Window - Tables



4. From the **Client** menu of the Connection Manager Monitor window, choose **Connect**. The Select Connection Manager window appears.

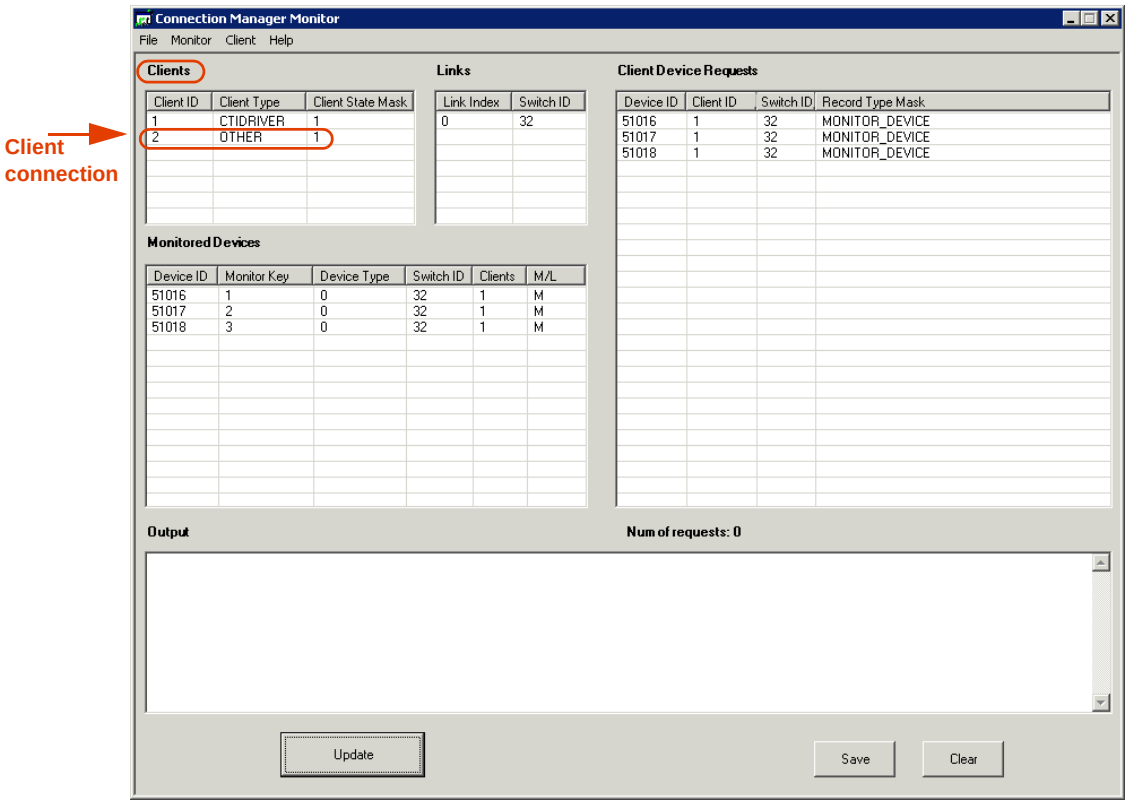
Figure 5-12 Connection Manager Window - Client Menu



5. Type the **Connection Manager ID** of the Interactions Center to which you want to connect. Click **OK**.

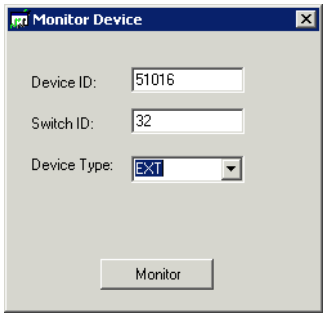
   After the Connection Manager Monitor establishes connection to the desired Connection Manager, the **Monitor**, **Stop Monitor**, and **Disconnect** options in the **Client** menu become enabled. The Client connection appears in the **Clients** area.

Figure 5-13 Connection Manager Monitor - Client Connection in Clients Area



6. From the **Client** menu, choose **Monitor**. The Monitor Device window appears.

Figure 5-14 Monitor Device Window



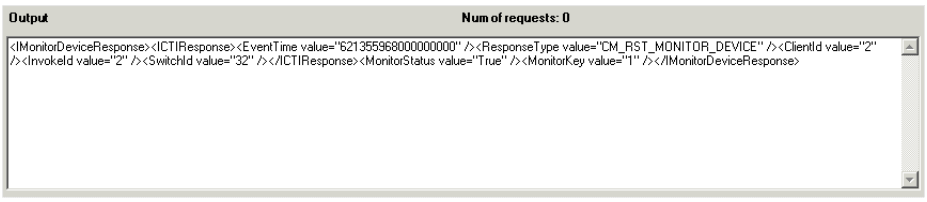
a. In the **Device ID** field, type the Device ID number of the Connection Manager to which you want to connect.

b. In the **Switch ID** field, type the Switch ID number.

c. From the **Device Type** drop-down list, choose the appropriate device type.

d. Click **Monitor**. The response appears in the **Output** area.

Figure 5-15 Output Area

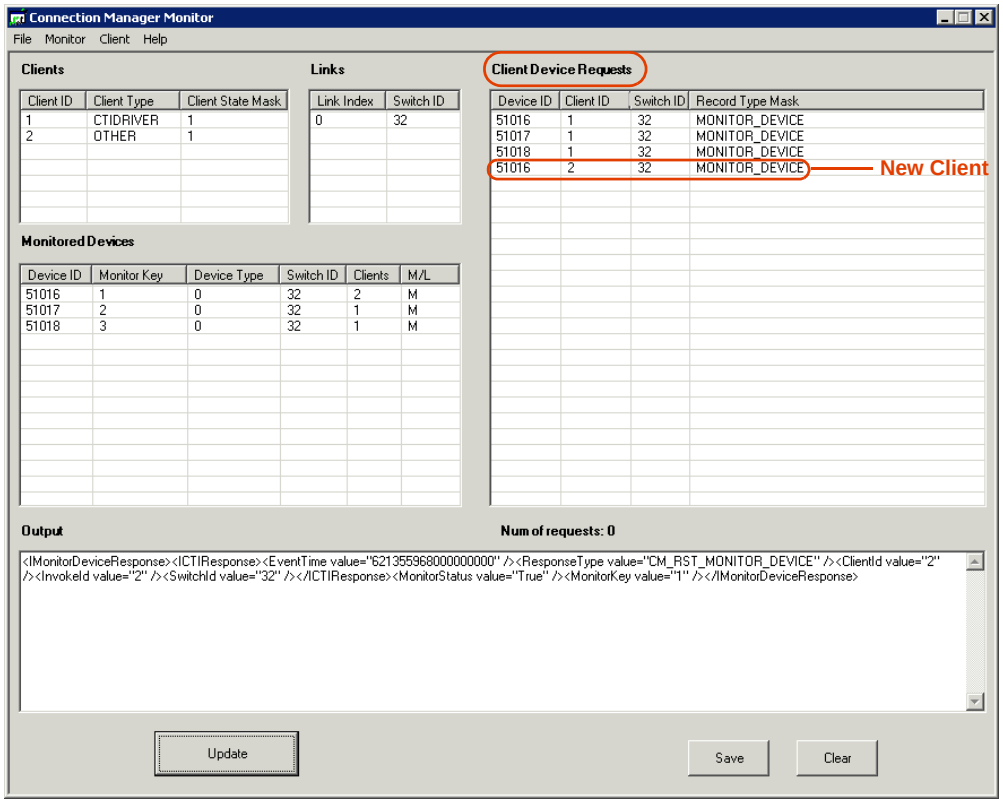


IMPORTANT

The Connection Manager Monitor window does not continuously refresh the data displayed in the window; it only displays the data current at the time you establish the connection. To update the data displayed in the window, click **Update**.

7. Click **Update**. The new Client appears in the **Client Device Requests** area.

Figure 5-16 Connection Manager Monitor - Client Device Requests Area



Managing the Connection Manager Monitor

This section includes the following topics:

- Stopping the Connection Manager Monitor
- Disconnecting the Connection Manager Monitor Client

Stopping the Connection Manager Monitor

This procedure describes how to stop the Connection Manager Monitor when it is functioning as a client.

To stop the Connection Manager Monitor:

1. From the **Client** menu of the Connection Manager Monitor window, choose **Stop Monitor**. The Stop Monitor Device window appears.

   Figure 5-17 Stop Monitor Device Window

2. Type the **Device ID** number and the **Switch ID** of the device you want to stop monitoring.
3. Click **Stop Monitor**. The response appears in the **Output** area.

Disconnecting the Connection Manager Monitor Client

This procedure describes how to disconnect the Connection Manager Monitor when it is functioning as a client.

To disconnect the Connection Manager Monitor Client:

- From the **Client** menu of the Connection Manager Monitor window, choose **Disconnect**.

  The Client connection of the Connection Manager no longer appears in the **Clients** area and in the **Client Device Requests** area.

Log Manager System

The Log Manager system logs all significant system activity and maintains a log of all data, enabling you to view the history of all relevant system activity.

The Log Manager system has four main components:

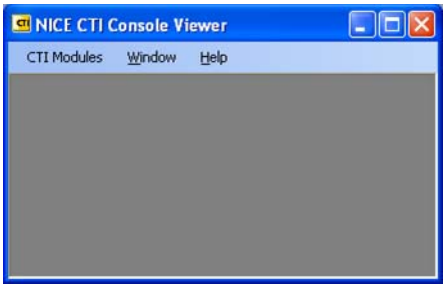
- **CTI Console Viewer**
- **Log Manager**
- **Log Manager Services**
- **Log Viewer**

CTI Console Viewer

The CTI Console Viewer enables real-time log tracking of the screens of all integration components installed on the local machine. This application replaces the Console windows in the Reporting Level of the integration process, and provides the user with filtering capability.

CTI Console Viewer has a separate window for each integration process. You can view and filter an event, as well as change the reporting level. You cannot do this in the System Administrator. Files are saved automatically in the Log Manager and can be viewed afterwards in the Log Viewer.

Figure 5-18 CTI Console Viewer



To open the CTI Console viewer:

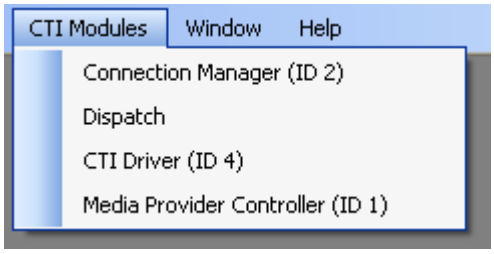
- To open, double-click the icon in the system tray.

-or-

- Right-click the icon, and select **Open NICE CTI Console Viewer**.

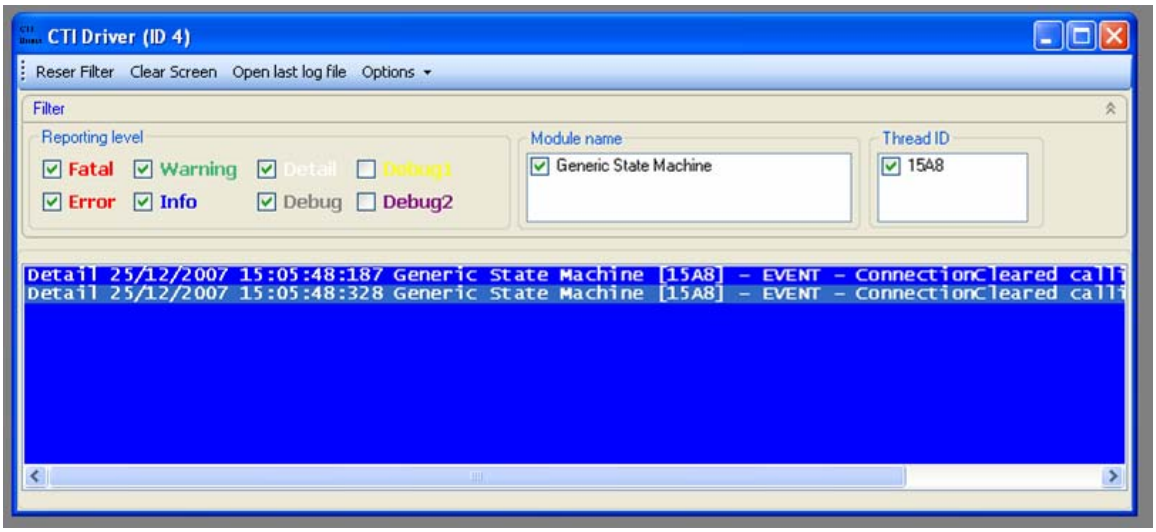
To open a specific integration process window:

1. From the **CTI Modules** menu, choose the relevant integration process.



A log window opens and the integration modules installed on the local machine are listed. (This list is updated when you add/remove any integration modules in the System Administrator).

Figure 5-19 CTI Log Window



NOTE: These reporting levels are only relevant for the CTI Console.

WARNING

Reporting levels may be helpful for troubleshooting. However, making changes to the reporting levels can greatly add to the load on your system. Changing reporting levels should therefore be done **only** by authorized personnel and in conjunction with NICE Customer Support.

Filtering Messages

You can filter messages in any of the following manners:

- **Reporting level** - Clear the checkboxes of the reporting levels that are irrelevant (message importance).

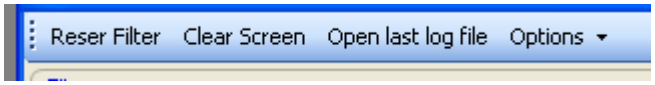
- **Module name -** Clear the checkboxes of any modules that are irrelevant.
- **Thread ID -** Clear the checkboxes of any Thread IDs that are irrelevant.

To reset the filter:

NOTE: The filter is applied to new messages. It does not affect old messages.

- Click the **Reset Filter** button.

  The filter in Module Name and Thread ID is reset, and all the messages are printed. (The Reset filter option does not affect the reporting level).



To clear the screen of messages:

- Click the **Clear Screen** button.

  All the messages are cleared from the screen.

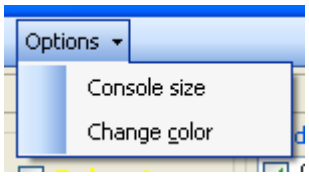
To open the last log file:

- Click the **Open last log file** button.

  The current log file with Log Viewer opens (see Log Viewer section). You can see log messages from the specific modules in real-time as they are displayed.

To change console size and color:

1. From the **Options** menu, choose **Console size**.



   When the log window is filled with the maximum number of messages, the top rows are automatically deleted.

2. From the **Options** menu, choose **Change color**.
   a. Select a background color.
   b. Select a color for each reporting level.

Log Manager

The Log Manager creates log message files and/or sends information regarding the Console and the Event Log according to the predefined Reporting Level filter.

WARNING

Reporting levels may be helpful for troubleshooting. However, making changes to the reporting levels can greatly add to the load on your system. Changing reporting levels should therefore be done **only** by authorized personnel and in conjunction with NICE Customer Support.

You can set the reporting levels in any of the integration branches e.g. in the Connection Managers, in the Drivers, in the Key Managers, in the Media Provider Controllers (Observers), or in the New Driver wizards when you initially set up the driver.

By default, reporting levels are defined for the following:

- **Console** - reports to the standard Console window
- **File** - reports to the Log file located in the Integrations installation folder
- **Event Log** - reports to the Log files located in the Event Viewer

NOTE: The Event Viewer is a Microsoft feature which can be viewed under the **Control Panel > Administrative Tools**.

If necessary, you can also manage the size of the log files, the amount of disk space dedicated to them, and the number of days you wish to keep log files.

To define the reporting levels:

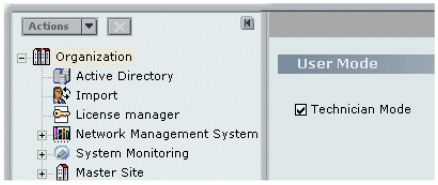
1. Open the System Administrator, as follows:
   a. Log in to the NICE Perform Applications Suite.
   b. From the **Accessories** menu, choose **System Administrator**.

The System Administrator appears with a list of NICE components under the **Site** branch in the **Organization** tree.

To add components in the System Administrator, you must work in Technician Mode.

2. Set the System Administrator to Technician Mode:

   - In the Organization Tree, select the **Organization** branch.



3. Mark the **Technician Mode** checkbox and click **Save** .

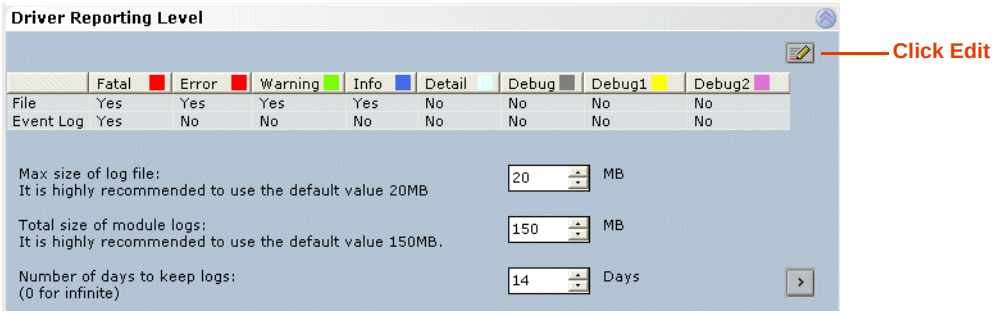
4. You can set the Reporting Level in any of the branches, see the examples below:

   - In the **Organization** tree, expand **Master Site > CTI Integrations > Connection Managers** and click the relevant **Connection Manager**. In the **Connection Manager Details** area, expand **Reporting Level**.

     -or-

   - In the **Organization** tree, expand **Master Site > CTI Integrations > Drivers**. In the **Driver General Information** area, expand **Driver Reporting Level**.

Figure 5-20 Driver Reporting Level Area



5. Choose the desired row and click **Edit** . The Set Reporting Level window appears.

Figure 5-21 Set Reporting Level Window

6. Mark the checkboxes for the reporting levels you want to include and click **OK**.

NOTE: It is highly recommended that you do not change the settings of the default reporting levels. Changing reporting levels should be done **only** by authorized personnel and in conjunction with NICE Customer Support.

7. In the relevant log field, type the new setting and click **Save**  .

Log Manager Services

The Log Manager's second module can be found in **Services**. It consists of two log manager related services:

- Nice Integration Log Retention
- Nice Integration Reporting Level Dumper

WARNING

You should not change any values in the Registry. All changes should be made through the System Administrator application and be done **only** by authorized personnel and in conjunction with NICE Customer Support.

Log Viewer

The Log Viewer enables you to view the log files and to filter them. You can keep several logs open at the same time.

Filtering Logs

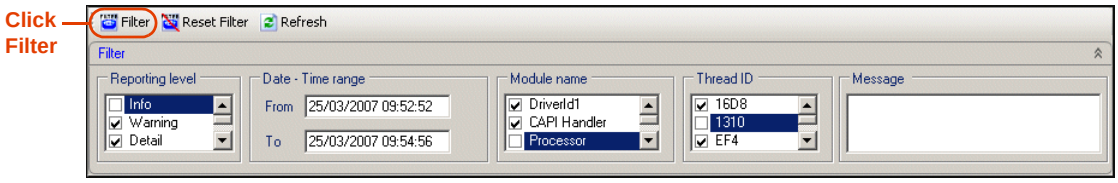
You can filter the logs according to the following criteria:

- **Reporting level:** Clear the reporting levels that are irrelevant.
- **Date**: Choose the appropriate time range.
- **Module name**: Unmark any modules that are irrelevant.
- **Thread ID**: Unmark any thread IDs that are irrelevant.
- **Message**: Type any relevant message.

To filter a log file:

1. In the Interaction Center, navigate to the **Tools** folder (the default location is **D:\NICECTI\Integrations\Tools**).
2. Double-click **LogViewer.exe**. The Log Viewer window appears.
3. Using Windows Explorer, select the relevant log files and drag them to the **Log Viewer**.
4. In the **Filter** area, mark the relevant filter options.

Figure 5-22 Log Viewer Window



5. Click **Filter**. The filtered logs appear in the Log Viewer window.
6. To save the filtered log file for future reference: from the **File** menu, choose **Save as**. The Save as window appears.
7. Name the filtered log file appropriately.

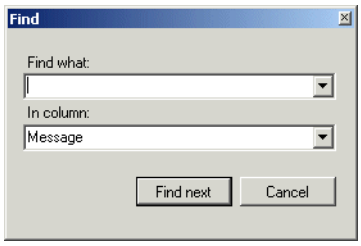
Searching Logs

The Log Viewer enables you to search for specific text within a specific column or within all columns. The Log Viewer remembers past searches.

To search for a specific text value:

1. From the **Edit** menu, choose **Find**. The Find window appears.

Figure 5-23 Find Window



2. Click the **In column** drop-down list and choose the relevant search basis.
3. Click **Find next**.

CAPI Spy

The CAPI Spy enables you to monitor all messages sent by the CTI driver to the CLS CAPI (Call Server). Examination of these messages enables you to pinpoint whether the problem is in the CTI driver or in the CLS CAPI server.

CAPI Spy has two main components:

- CAPI Spy Plug-in
- CAPI Spy Utility

CAPI Spy Plug-in

The CAPI Spy plug-in is one of the standard CTI driver plug-ins. You set it up in the System Administrator. Only marked plug-ins are executed by the CTI driver.

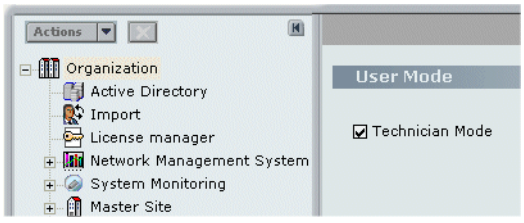
To set up the CAPI Spy Plug-in:

1. Open the System Administrator, as follows:
   a. Login to the NICE Perform Applications Suite.
   b. From the **Accessories** menu, choose **System Administrator**.

   The System Administrator appears with a list of NICE components under the **Site** branch in the **Organization** tree.

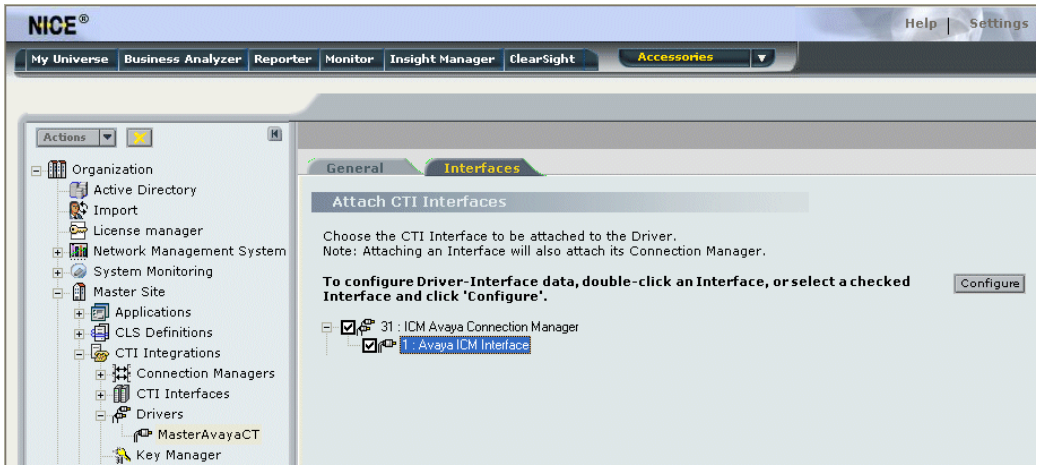
   To add components in the System Administrator, you must work in Technician Mode.

2. Set the System Administrator to Technician Mode:
   a. In the Organization Tree, select the **Organization** branch.



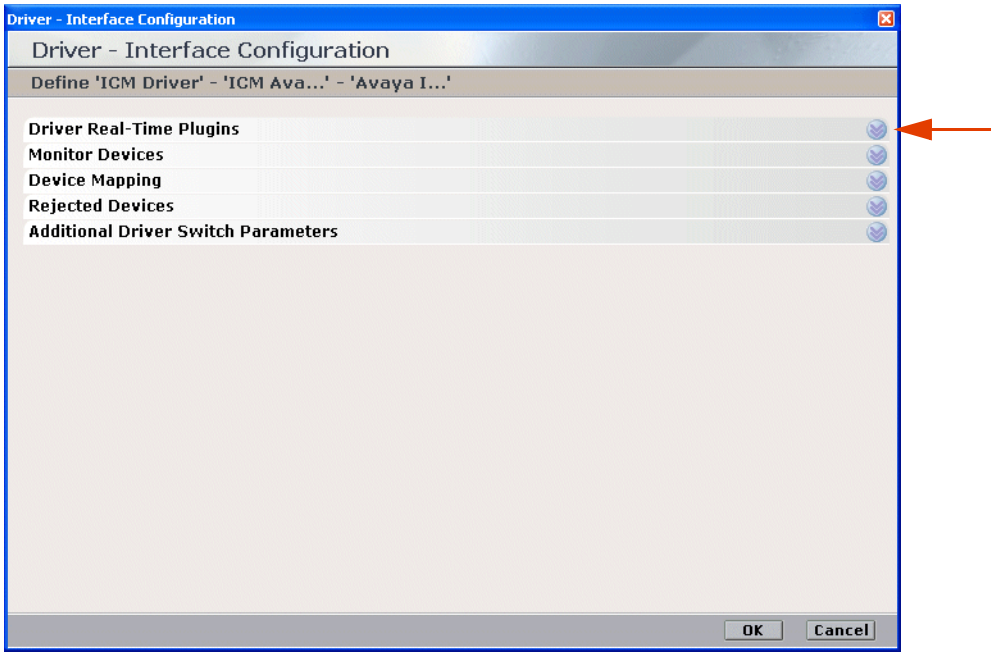
   b. Mark the **Technician Mode** checkbox and click **Save**  .
3. In the **Organization** tree, navigate to **Master Site > CTI Integrations > Drivers**. Click the relevant driver.
4. Click the **Interfaces** tab.

Figure 5-24 Drivers > Interfaces Tab



5. In the **Attach CTI Interfaces** section, click the relevant interface driver and click **Configure**. The Driver - Interface Configuration window appears.

Figure 5-25 Driver - Interface Configuration Window

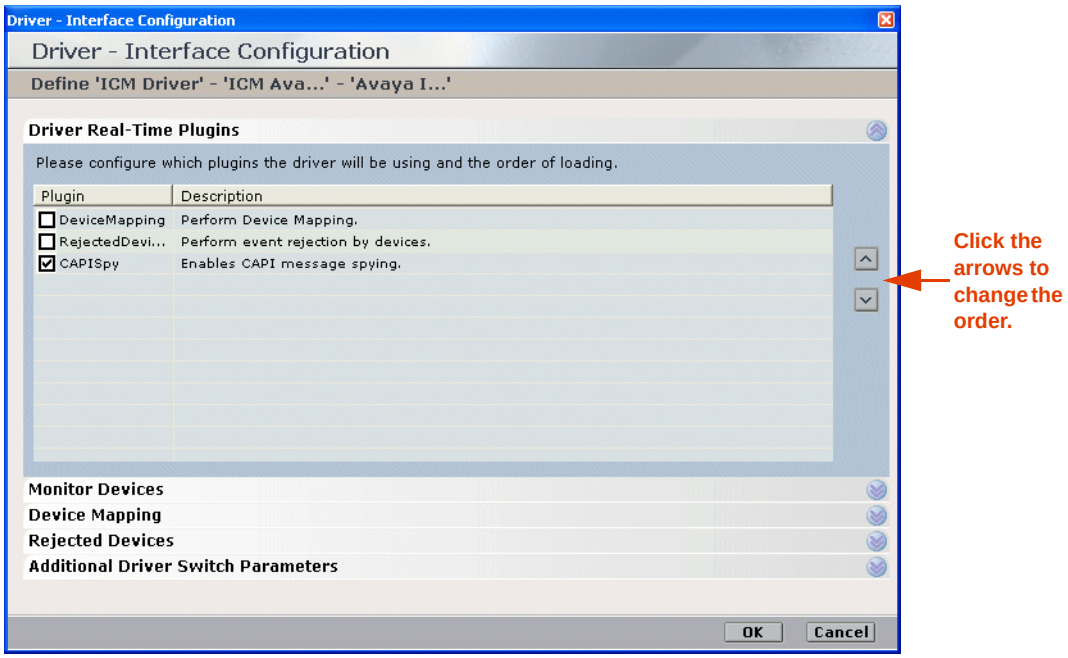


6. Expand **Driver Real-Time Plugins**.

IMPORTANT

You can mark CAPISpy once and then leave it marked, as it has no negative impact on the system.

Figure 5-26 Driver Real-Time Plugins Area



7. Mark the **CAPISpy** checkbox and click **OK**.

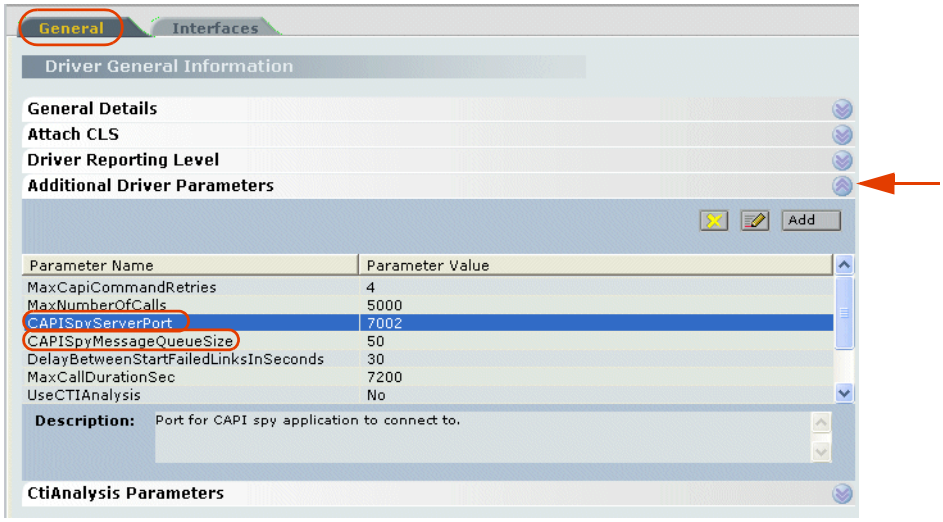
NOTE: It is highly recommended that CAPISpy should be the last entry in the Driver Real-Time Plugins list. This enables you to see any changes that may have come about because of other plugins.

You can change the order of the drivers by clicking the arrows.

After you mark or unmark the CAPISpy checkbox, you must restart the driver before the change will take effect.

8. Click the **General** tab and expand **Additional Driver Parameters**. The **Additional Driver Parameters** area displays.

Figure 5-27 Additional Driver Parameters Area



9. Define the CAPI Spy parameters according to the following table:

Table 5-2: CAPI Spy Parameters

Parameter Name	Description	Default Value
CAPISpyServerPort	Port to which the CAPI Spy connects. **NOTE:** You should not change the value of this parameter unless there is another third party application that uses this port. **If the value is changed**, restart the driver. Then configure the CAPI Spy application to connect to the new port. See Changing Connection Details.	7002
CAPISpyMessageQueueSize	Size of message queue in CAPI Spy server. **NOTE:** Be careful about setting this to a higher value as it can slow driver performance.	50

10. Click **Save**  .

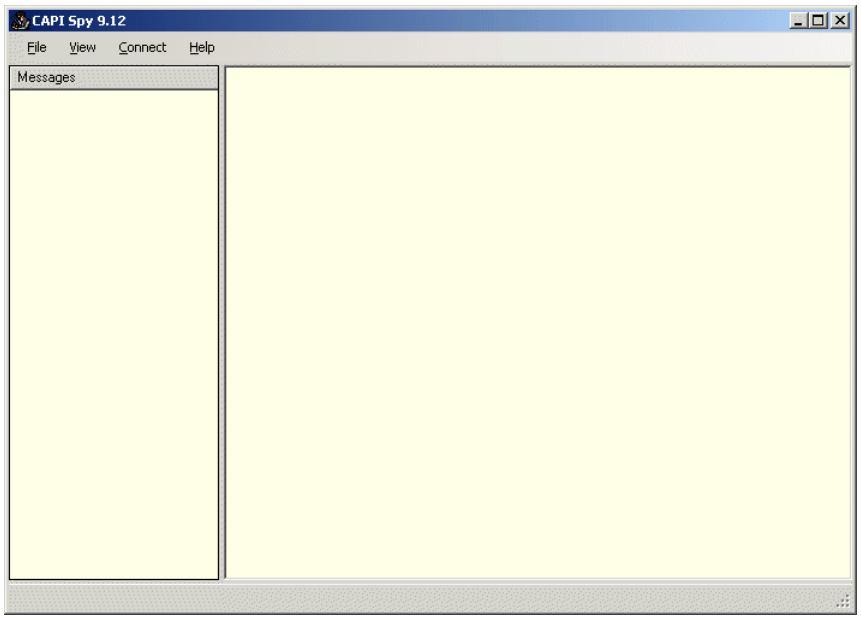
CAPI Spy Utility

NICE Systems provides a utility for viewing the CAPI Spy messages in XML format.

To set up the CAPI Spy:

1. In the NICE Interactions Center, navigate to the **Integrations** folder (the default location is **D:\NICECTI\Integrations)**. Double-click **CAPISpy.exe**. The CAPI Spy window appears.

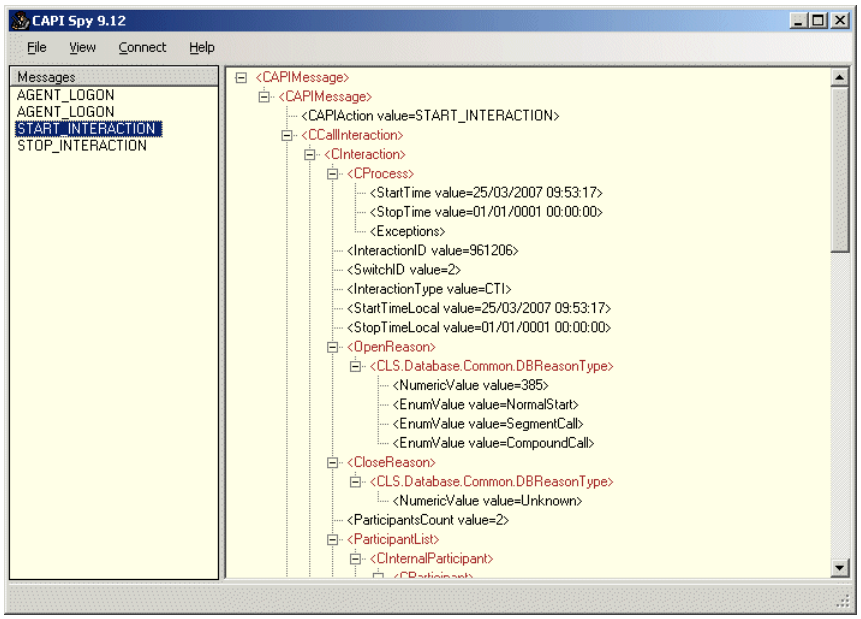
Figure 5-28 CAPI Spy Window



2. From the **Connect** menu, choose **Connect to CTI Driver**.

   After the CAPI CTI driver and the CAPI Spy utility are connected, the CAPI Spy starts displaying CAPI messages.

Figure 5-29 CAPI Spy Window Displaying Messages



NOTE: If the connection is not successful, an error message appears. Contact NICE Customer Support.

If the connection is dropped, an error message appears. To reconnect the connection, from the **Connect** menu, choose **Connect to CTI Driver**.

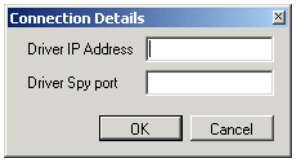
Changing Connection Details

The CAPI Spy by default connects to the localhost CTI driver on the 7002 port. When port 7002 is used by another third party application, you can change the port. See CAPI Spy Plug-in.

To change the connection details:

1. From the **Connect** menu, choose **Change connection details**. The Connection Details window appears.

   Figure 5-30 Connection Details Window

2. Type the **Driver IP Address** and the **Driver Spy port**.
3. Click **OK**.

NOTE: You can also monitor CAPI messages from a different host. In this case, type the IP address of the remote machine. This can seriously overload the network and should be avoided if possible.

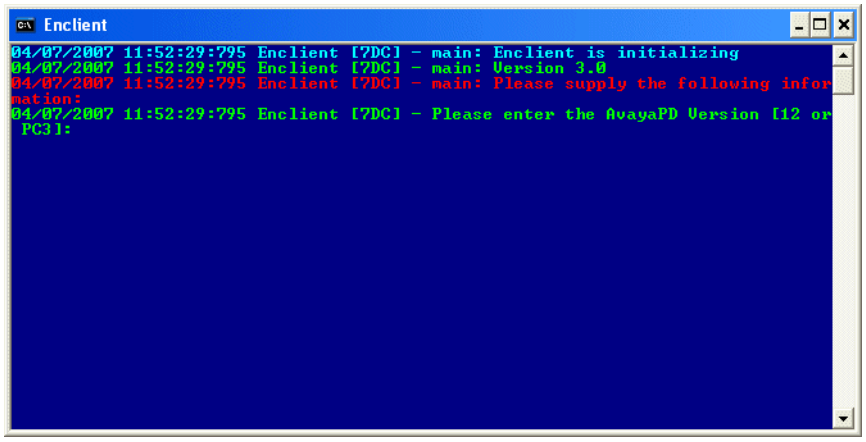
Enclient

This is a debugging tool for Avaya PD. To run the tool, follow the procedures below.

To run the Enclient debugging tool:

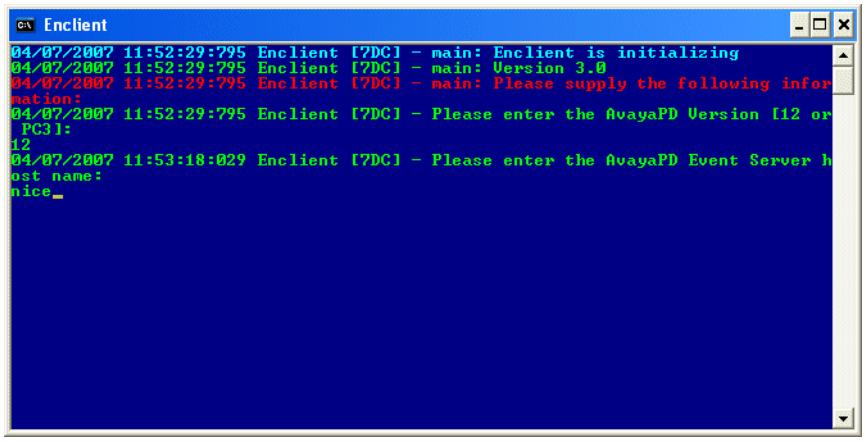
1. In the Interactions Center, navigate to the **Integrations** folder (the default location is **D:\NICECTI\Integrations**). Double-click **enclient.exe**. The Enclient window appears.

Figure 5-31 Enclient Window - Enter Version



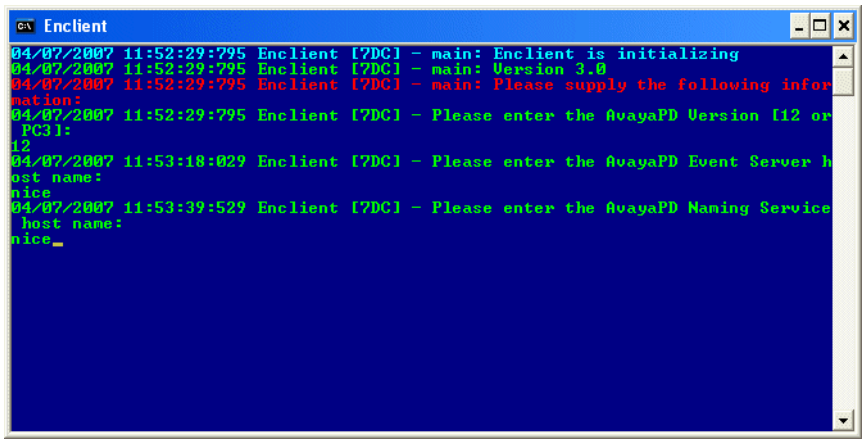
2. Type the version of Avaya PD - **12** or **PC3**. Press **<Enter>**.

Figure 5-32 Enclient Window - Event Server Host Name



3. Type the name of the Event Server host name. Press **<Enter>**.

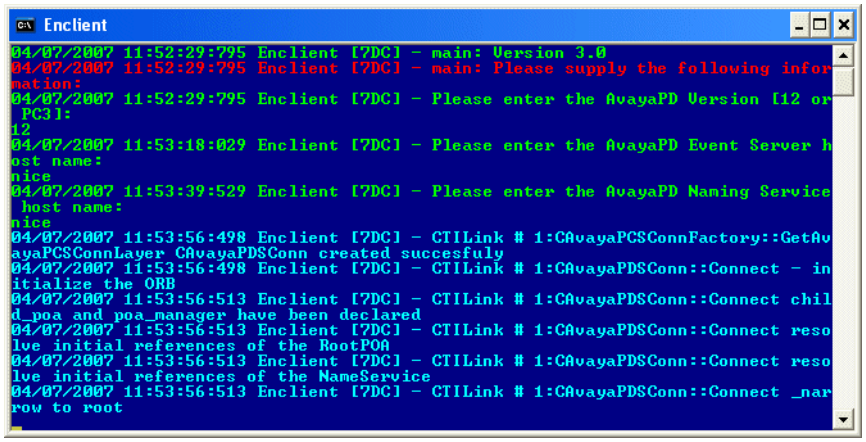
Figure 5-33 Enclient Window - Naming Service Host Name



NOTE: Allow Enclient to run as recommended by NICE Customer Support.

4. Type the name of the Avaya PD Naming Service host name. Press **<Enter>**.

Figure 5-34 Enclient Window



5. Send log files and dump files to NICE Customer Support.

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A

Avaya PD Additional Parameters

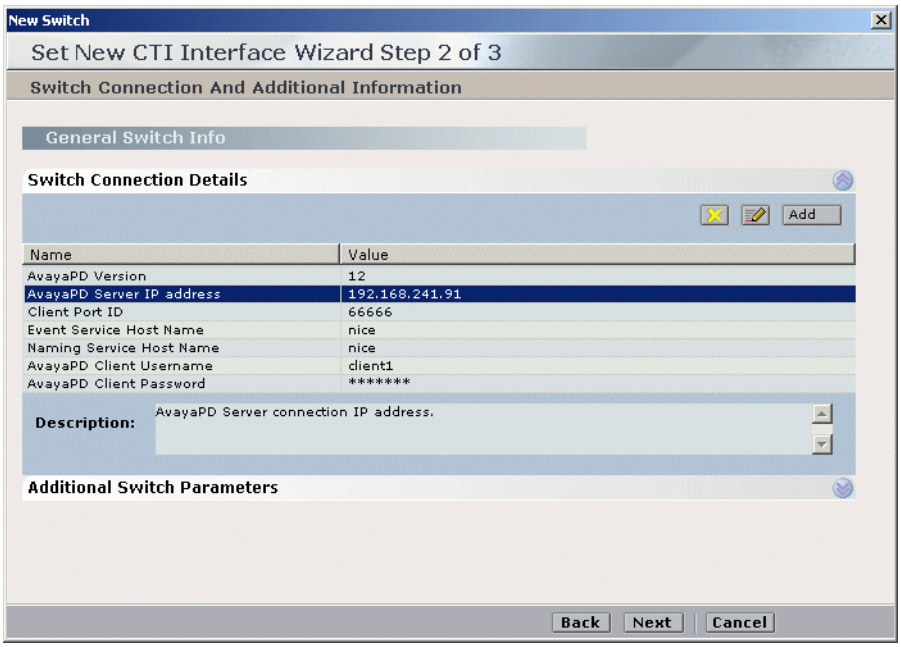
CTI Interface - Switch Connection Details Parameters

WARNING

Changing parameters may have severe effects on your system. Therefore changing the CTI Interface Additional Parameters, or creating new ones, should be done **only** by authorized personnel and with authorization by NICE Customer Support.

Additional Parameters for configuring the CTI Interface are located in the Switch Connection Details of the CTI Interface wizard (see **Configuring the CTI Interface** on **page 36**).

Figure A-1 Switch Connection Details Window



The following predefined additional parameters appear for Avaya PD's Switch Connection Details. To change the default parameters, follow the procedures below.

NOTE: You can also create and add additional parameters by clicking **Add**.

Parameter Name	Description	Default Value
AvayaPD Version	Indicates the Avaya PD version you are using. Choose either 12 or PC3.	12
AvayaPD Server IP address	Indicates the Avaya PD network IP address.	
Client Port ID	Indicates the switch connection's port ID.	66666

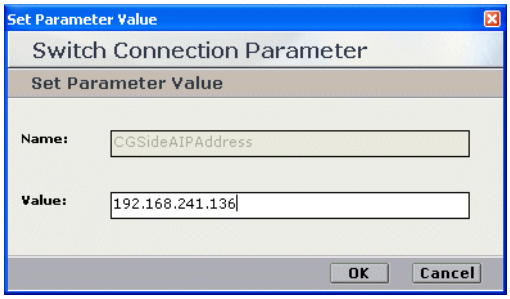
Parameter Name	Description (Continued)	Default Value
Event Service Server Host Name	Indicates the event service host name.	
Naming Service Host Name	Indicates the naming service host name.	
AvayaPD Client Username	Defines the protocol setting according to the version number.	client1*
AvayaPD Client Password	Indicates the client peripheral number that matches the PABX connected to the ICM.	*

* Contact your Avaya site administrator for this information.

To change the default values:

1. Double-click the row of the relevant parameter. The Switch Connection Parameter window appears.

Figure A-2 Switch Connection Parameter Window

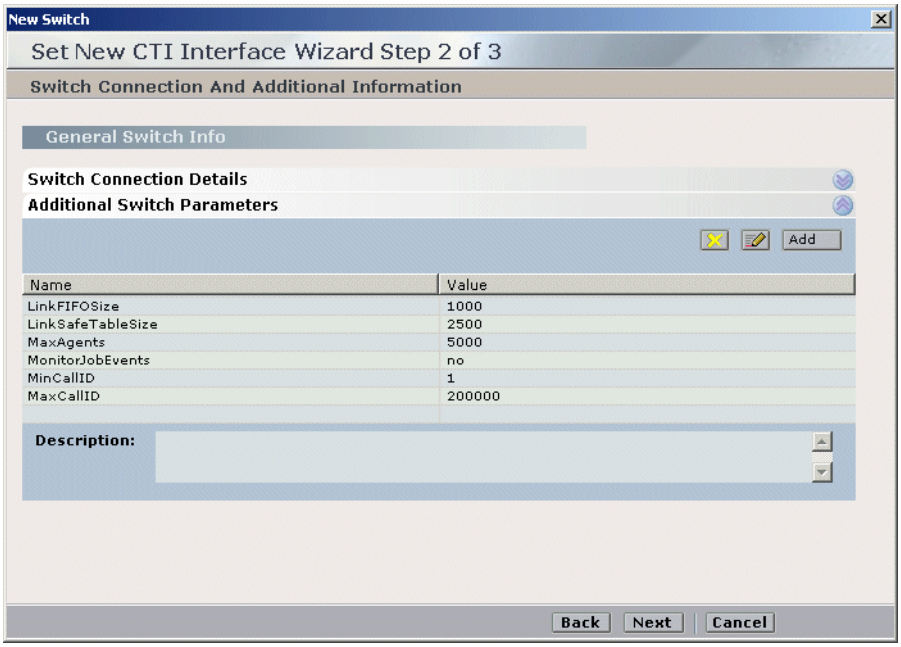


2. In the **Value** field, type the desired value.
3. Click **OK**.

CTI Interface - Additional Switch Parameters

Additional Parameters for configuring the CTI Interface are located in the Additional Switch Parameters window of the CTI Interface wizard (see **Configuring the CTI Interface** on **page 36**).

Figure A-3 Additional Switch Parameters Window



The following predefined additional parameters appear for Avaya PD's Additional Switch Parameters:

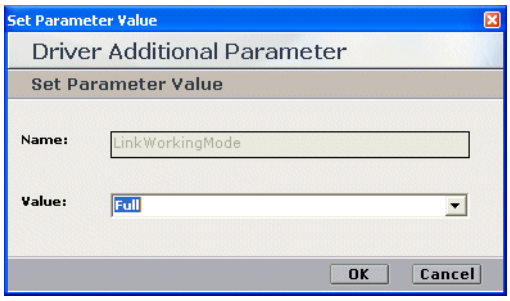
Parameter Name	Description	Default Value
LinkFiFoSize	Defines the size of the FiFos in the link.	1000
LinkSafeTableSize	Defines the size of the safe tables in the link.	2500
MaxAgents	Defines the maximum agents allowed.	5000
MonitorJobEvents	Defines whether to monitor job events.	No
MinCallID	Defines the minimum number of Call IDs with which the link will start reporting.	1
MaxCallID	Defines the maximum number of Call IDs with which the link will start reporting.	200000

NOTE: Ensure that you have a range of at least 10,000 between the minimum and maximum Call ID numbers.

To change the default values:

1. Double-click the row of the relevant parameter. The Driver Additional Parameter window appears.

Figure A-4 Driver Additional Parameter Window



2. In the **Value** field, type the desired value.
3. Click **OK**.

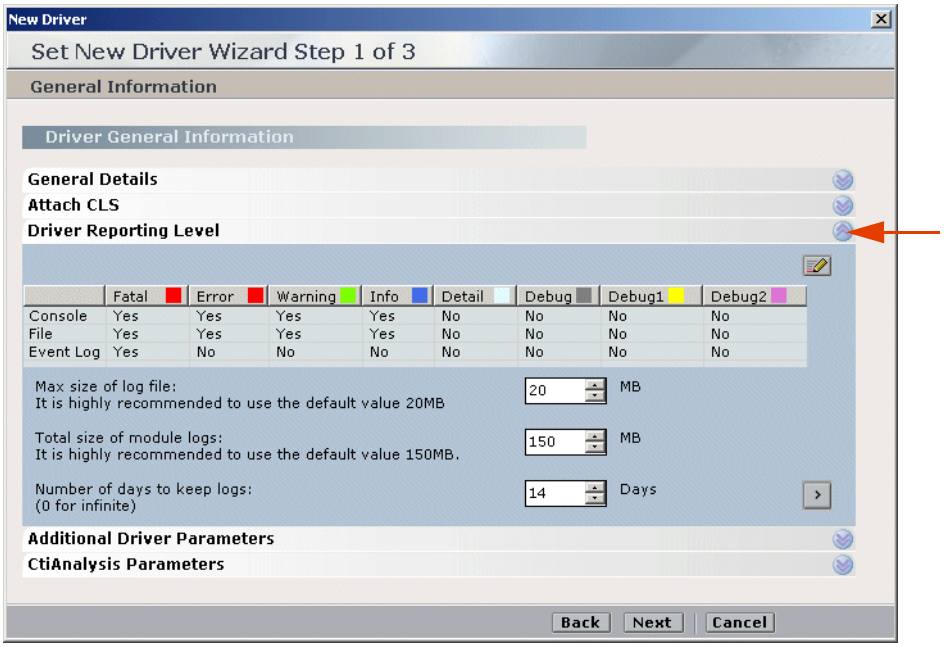
Reporting Levels

WARNING

Reporting Levels may be helpful for troubleshooting. However, making changes to the Reporting Levels can greatly add to the load on your system. Changing Reporting Levels should therefore be done **only** by authorized personnel and in conjunction with NICE Customer Support.

Reporting Levels are defined in the General Information window of the Connection Manager and the New Driver wizards, see **Configuring the Connection Manager** on **page 42** and **Defining the Driver** on **page 46**.

Figure A-5 Reporting Level Area



By default reporting levels are defined for the following:

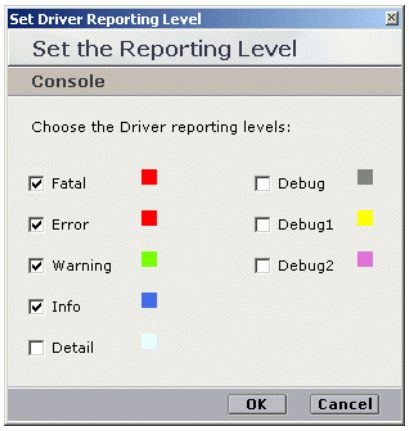
- **Console** - reports to the NICE Log Manager
- **File** - reports to the Log file located in the Integrations installation folder
- **Event Log** - reports to the Log files located in the Event Viewer

NOTE: The Event Viewer is a Microsoft feature which can be viewed under the **Control Panel > Administrative Tools**.

To define reporting levels:

1. Choose the desired row and click **Edit**. The Set Reporting Level window appears.

Figure A-6 Set Reporting Level Window



2. Mark the checkboxes for the reporting levels you want to include and click **OK**.

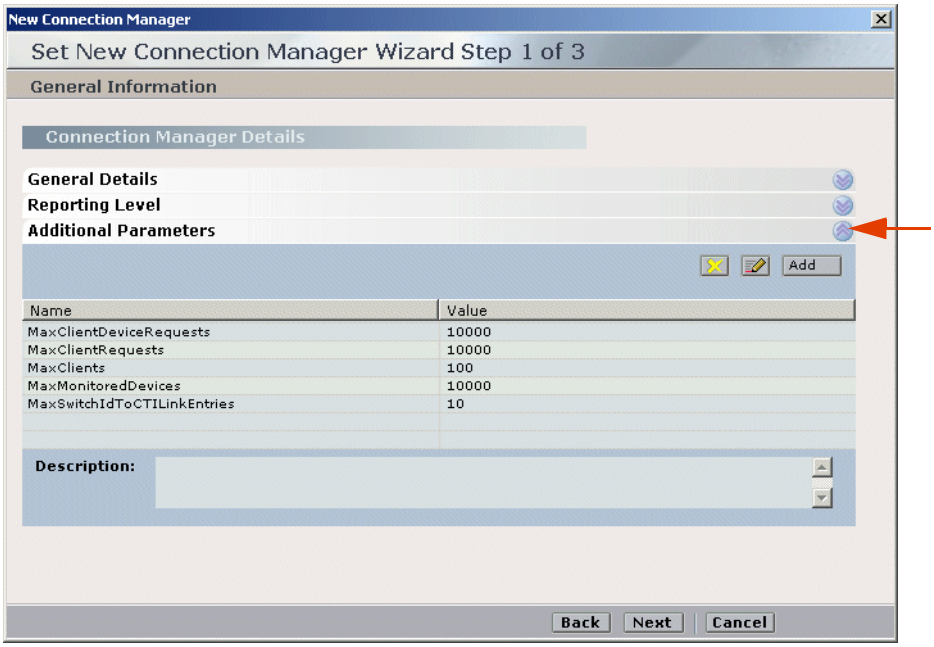
Connection Manager - Additional Parameters

WARNING

Changing parameters may have severe effects on your system. Therefore changing the Connection Manager Additional Parameters, or creating new ones, should be done **only** by authorized personnel and with authorization by NICE Customer Support.

Additional Parameters for configuring the Connection Manager are located in the General Information window of the Connection Manager wizard, see **Configuring the Connection Manager** on **page 42**.

Figure A-7 Additional Parameters Area



The following predefined additional parameters appear:

NOTE: You can also create and add additional parameters by clicking **Add**.

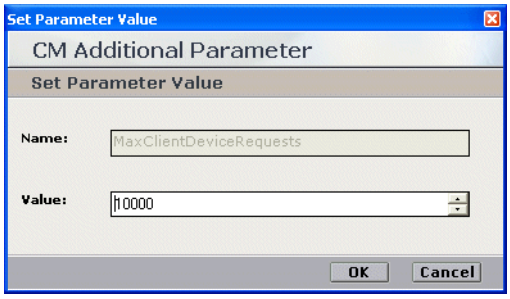
Parameter Name	Description	Default Value
MaxClientDeviceRequests	Defines the maximum number of device requests that Connection Manager can handle.	1000
MaxClientRequests	Defines the maximum number of client requests that Connection Manager can handle.	1000

Parameter Name	Description (Continued)	Default Value
MaxClients	Defines the maximum number of clients that can be attached to Connection Manager.	100
MaxMonitoredDevices	Defines the maximum number of monitored devices up to which the Connection Manager can handle. For example, if the value is 1000 the Connection Manager can handle 999 monitored devices.	1000
MaxSwitchIdToCTILinkEntries	Defines the maximum number of CTI links Connection Manager can handle.	10

To change the default value:

1. Double-click the row of the relevant parameter. The CM Additional Parameter window appears.

Figure A-8 CM Additional Parameter Window



2. In the **Value** field, type the desired value and click **OK**.

Connection Manager - Interface Parameters

WARNING

Changing parameters may have severe effects on your system. Therefore changing the Connection Manager Interface Parameters, or creating new ones, should be done **only** by authorized personnel and with authorization by NICE Customer Support.

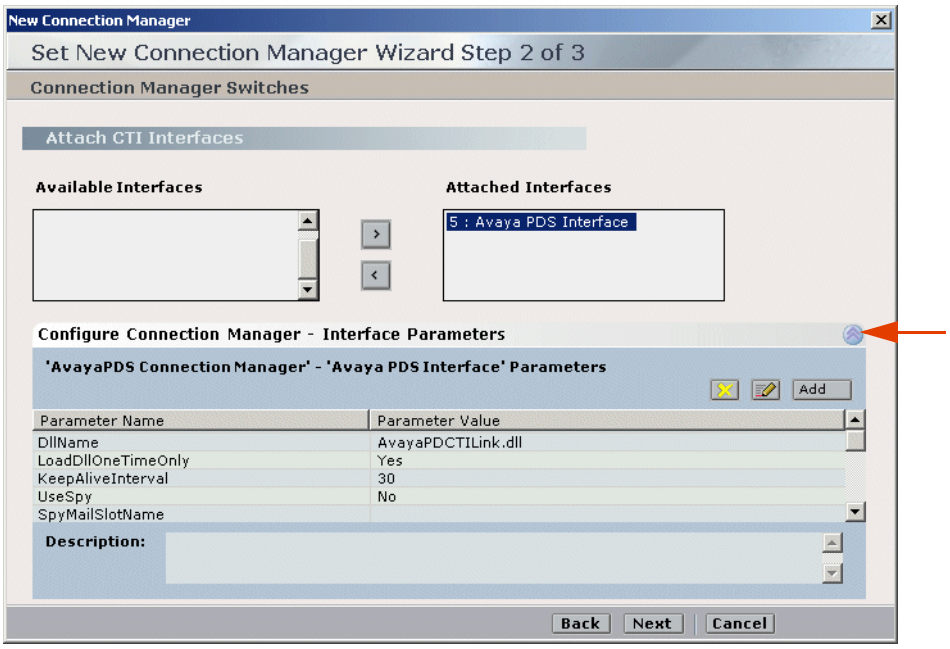
Interface parameters for the Connection Manager are located in the Connection Manager Switches Information window of the Connection Manager wizard, see **Configuring the Connection Manager** on **page 42**.

Configure Connection Manager - Interface Parameters

The Connection Manager - Interface has its own predefined parameters.

NOTE: You can also create and add additional parameters by clicking **Add**.

Figure A-9 Configure Connection Manager - Interface Parameters Area



The following predefined additional parameters appear:

Parameter Name	Description	Default Value
DllName	The name of the DLL that contains the CTI Link translator. This DLL is dynamically installed when you define a new Connection Manager.	Read-only
LoadDllOneTimeOnly	Defines the way the driver treats the link in a multi-link configuration.	
KeepAliveInterval	Defines the Keep Alive Interval time. The value is defined in seconds.	30
UseSpy*	Defines if the Connection Manager reports link events to the NICE Events Spy tool.*	No
SpyMailSlotName	Defines the name of the mailslot between the Connection Manager and the NICE Events Spy tool. ***IMPORTANT:*** Define this parameter **only** if you defined **Yes** for the **UseSpy** parameter.	
UseSimCTILink**	Defines if the Connection Manager uses the SimCTILink tool to read events.**	No
SimMailSlotName	Defines the name of the SIM mailslot between the Connection Manager and the Spy tool. ***IMPORTANT:*** Define this parameter **only** if you defined **Yes** for the **UseSimCTILink** parameter.	

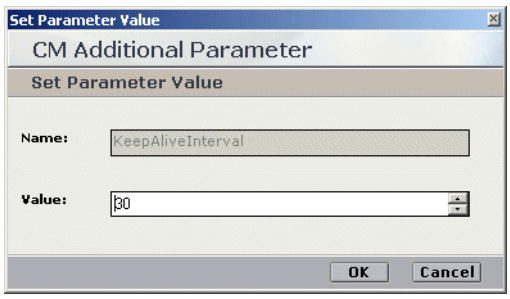
* For details, see **NICE Events Spy** on **page 64**.

** For details, see **Setting up the SimCTILink Tool** on **page 68**.

To change the default value:

1. Double-click the row of the relevant parameter. The CM Additional Parameter window appears.

Figure A-10 CM Additional Parameter Window



2. In the **Value** field, type the desired value and click **OK**.

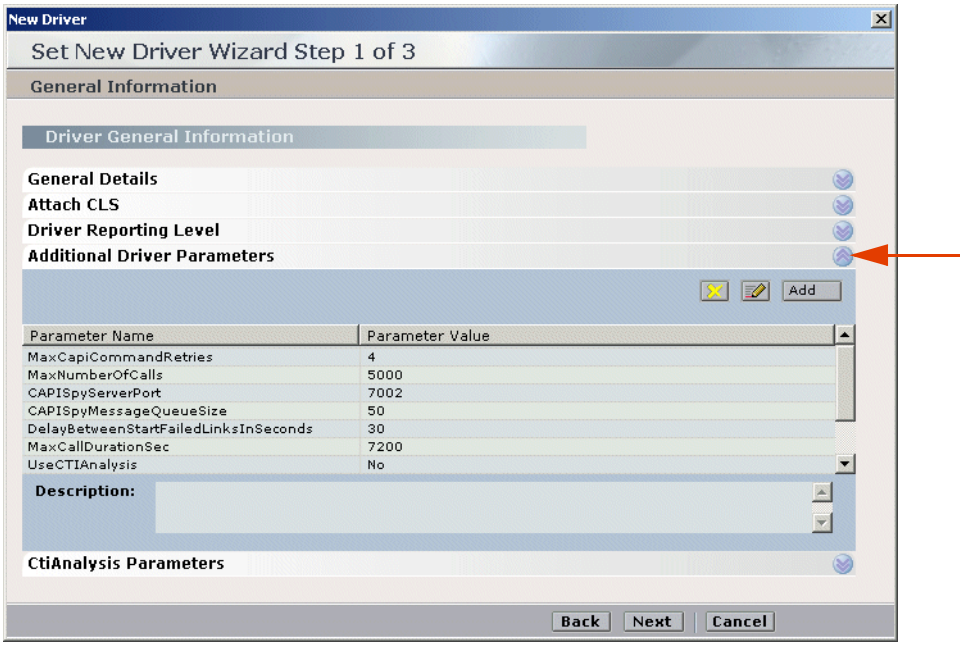
Driver - Additional Driver Parameters

WARNING

Changing parameters may have severe effects on your system. Therefore changing the Driver Additional Parameters, or creating new ones, should be done **only** by authorized personnel and with authorization by NICE Customer Support.

Additional parameters for configuring the Driver are located in the General Information window of the New Driver wizard, (see **Defining the Driver** on **page 46**).

Figure A-11 Additional Driver Parameters Area



The following predefined additional parameters appear:

NOTE: You can also create and add additional parameters by clicking **Add**.

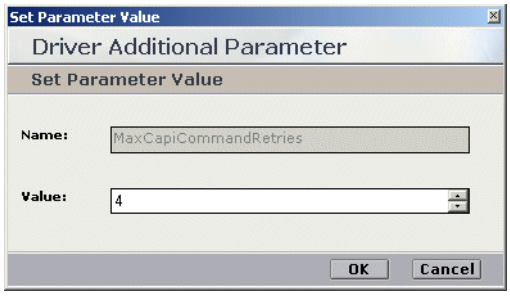
Parameter Name	Description	Default Value
MaxCapiCommandRetries	Defines the number of times the driver attempts to send a command to the CAPI following a failure.	4
MaxNumberOfCalls	Defines the maximum number of calls in the concurrent calls buffer.	5000
CAPISpyServerPort	Defines the port to which the CAPI spy application connects.	7002

Parameter Name	Description (Continued)	Default Value
CAPISpyMessageQueueSize	Size of the message queue in the CAPI Spy server.	50
UseEventDB	Defines if the driver uses the EventDB database for CTI Analysis.	No
DelayBetweenStartFailedLinksInSeconds	Defines the amount of time before the driver reconnects to the CTI link following a failure. The value is defined in seconds.	30
MaxCallDurationSec	Defines the maximum time the driver allows a call to last until it is automatically disconnected. The value is defined in seconds.	7200
UseCTIAnalysis	Defines if CTIA is in use in the driver.	No
CallTableHost	Host name of the Call Table.	localhost
CallTablePort	Port number of the Call Table.	7272
AlwaysConnecttoLocalCLS	Defines if the driver always connects to the NICE Interactions Center on the local machine regardless of the NICE Interactions Center's real address. Useful when working with CLS as a cluster.	No

To change the default value:

1. Double-click the row of the relevant parameter. The Driver Additional Parameter window appears.

Figure A-12 Driver Additional Parameter Window



2. In the **Value** field, type the desired value and click **OK**.

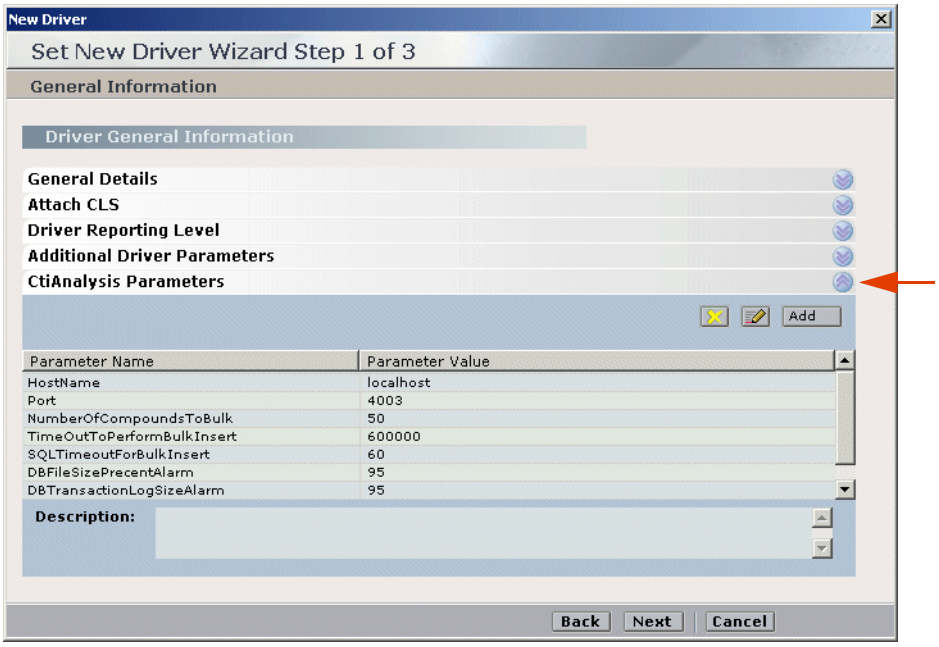
Driver - CTI Analysis Parameters

WARNING

Changing parameters may have severe effects on your system. Therefore changing the Driver CTI Analysis Parameters, or creating new ones, should be done **only** by authorized personnel and with authorization by NICE Customer Support.

CTI Analysis parameters for configuring the Driver are located in the General Information window of the Driver wizard, see **Defining the Driver** on **page 46**.

Figure A-13 CTI Analysis Parameters Area



The following predefined CTI Analysis parameters appear:

NOTE: You can also create and add additional parameters by clicking **Add** .

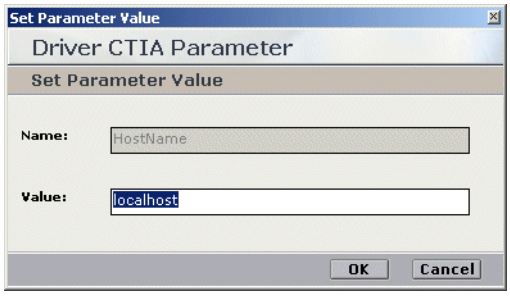
Parameter Name	Description	Default Value
HostName	Host name for the Analyzer server.	localhost
Port	Port for the Analyzer server.	4003
NumberOfCompoundsToBulk	Defines the number of compounds to bulk insert on each set.	50
TimeOutToPerformBulkInsert	Defines the number of milliseconds as timeout to perform bulk insert.	600000

Parameter Name	Description (Continued)	Default Value
SQLTimeoutForBulkInsert	Defines the number of seconds of SQL timeout for bulk insert.	60
DBFileSizePrecentAlarm	Defines the warning percentage size of the nice_cti_analysis database file. When this size is reached, an alarm is sent.	95
DBTransactionLogSizeAlarm	Defines the warning percentage size of the nice_cti_analysis transaction log file. When this size is reached, an alarm is sent.	95
DBFileSizesMonitorInterval	Defines the interval time (in minutes) to monitor the database file sizes.	10

To change the default value:

1. Double-click the row of the relevant parameter. The Driver CTIA Parameter window appears.

Figure A-14 Driver CTIA Parameter Window



2. In the **Value** field, type the desired value and click **OK**.

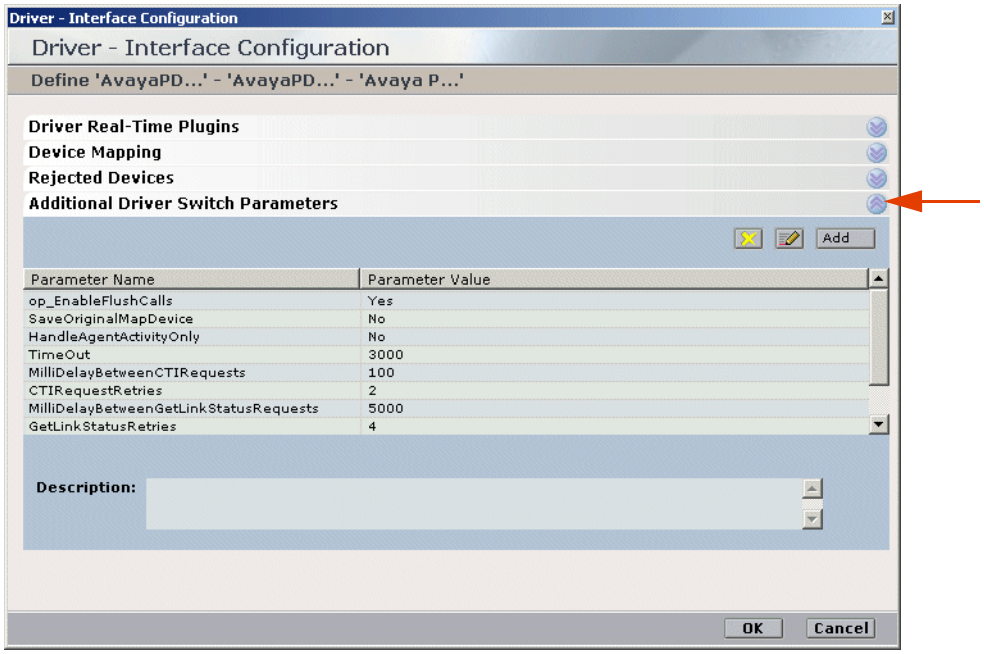
Driver Interface - Additional Driver Switch Parameters

WARNING

Changing parameters may have severe effects on your system. Therefore changing the Additional Driver Switch Parameters, or creating new ones, should be done **only** by authorized personnel and with authorization by NICE Customer Support.

Additional Parameters for configuring the Driver Interface are located in the Driver Interface Configuration window of the New Driver wizard, see **Defining the Driver** on **page 46**.

Figure A-15 Additional Driver Switch Parameters Area



The following predefined additional parameters appear:

NOTE: You can also create and add additional parameters by clicking **Add**.

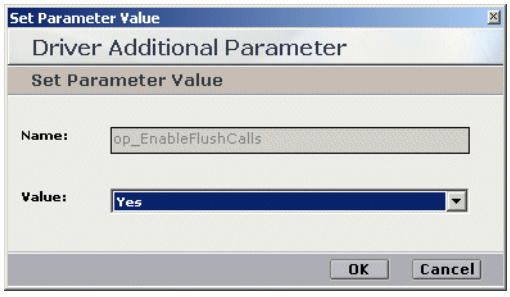
Parameter Name	Description	Default Value
op_EnableFlushCalls	Defines if the driver flushes open calls when initializing connection.	Yes
SaveOriginalMapDevice	Defines if the driver reports to the source device.	No
HandleAgentActivityOnly	Defines if the driver handles login/logout events only from this link.	No
TimeOut	Defines the response time for a request. The value is defined in milliseconds.	3000

Parameter Name	Description (Continued)	Default Value
MilliDelayBetweenCTIRequests	Defines the waiting time between CTI requests. The value is defined in milliseconds.	100
CTIRequestsRetries	Defines the number of times the CTI tries to request events for Query and Monitor devices.	2
MilliDelayBetweenGetLinkStatusRequests	Defines the waiting time between “Get Link Status” requests. The value is defined in milliseconds.	5000
GetLinkStatusRetries	Defines the number of times “Get Link Status” requests can be made.	4
FailedMonitoredThreadMinutesDelay	Defines the waiting time before reactivating a thread to monitor devices that the link had previously failed to monitor. The value is defined in minutes.	10

To change the default value:

1. Double-click the row of the relevant parameter. The Driver Additional Parameter window appears.

Figure A-16 Driver Additional Parameter Window



2. In the **Value** field, type the desired value and click **OK**.

B

Avaya Predictive Dialing System Events

This appendix provides general information about call and agent events generated by Avaya PDS.

Contents

Typical Agent Workflow in a Contact Center

Many contact centers with the Avaya PDS also use an Avaya switch for handling inbound call routing for strictly inbound agents as well as for blended agents.

Following is a typical Avaya PDS workflow in a contact center:

1. The agent logs into an Avaya phone using his regular telephone extension.
2. The agent logs into Avaya PDS via his soft phone.
3. The Avaya PDS application server registers the agent and assigns him an Agent ID.
4. Avaya PDS initiates a call back to the agent's extension. The agent completes the login process when he answers this call.

   This port stays off-hook and captures the agent for an outbound session.
5. Avaya PDS initiates an outbound call for the agent.
6. The agent is notified that he or she will receive outbound calls.
7. The agent starts to receive outbound calls.

   Referring to the workflow above, when the agent logs into the Avaya switch, the Call Server receives the Agent ID and Station information. When the agent logs into the Avaya PDS, Avaya PDS reports the Station only to the Call Server. When the agent answers an outbound call, Avaya PDS reports the extension, enabling the Call Server to match the Station to the Agent ID received from the Avaya switch.

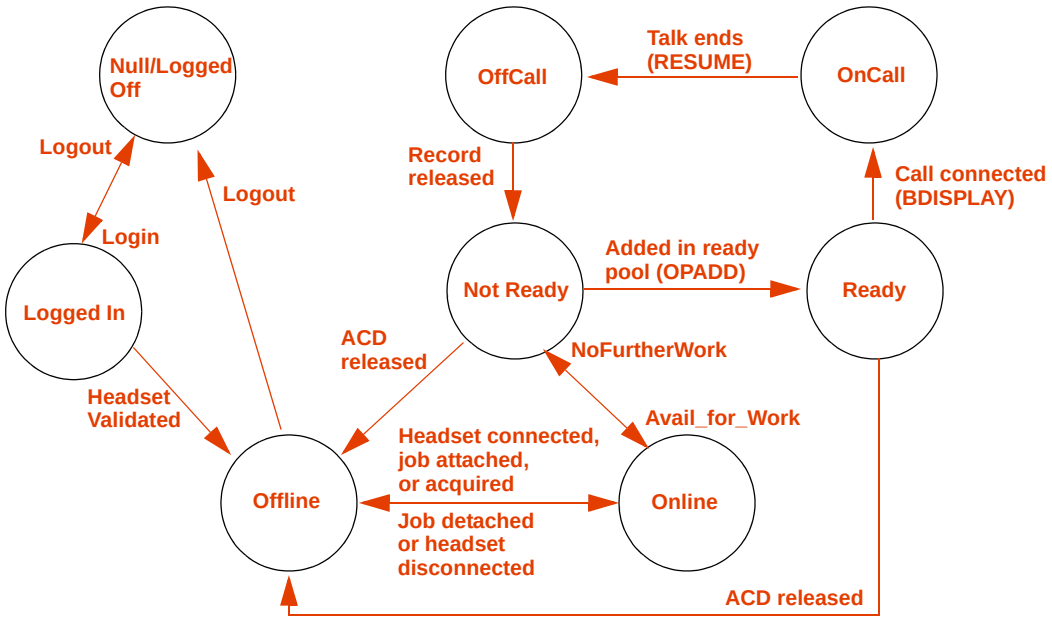
Possible Agent Event Scenarios

When an agent interacts with a customer and/or a customer's file, he progresses through different states in the Avaya PDS. These states may include:

- Not being logged into the Avaya PDS
- Being logged into the Avaya PDS but not attached to a specific job
- Being attached to a job but not available for work
- Being attached to a job, being available for work, but not ready for a call
- Waiting for a call
- Receiving a call

These agent states are depicted in Figure B-1.

Figure B-1 Schematic Diagram of Agent States



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